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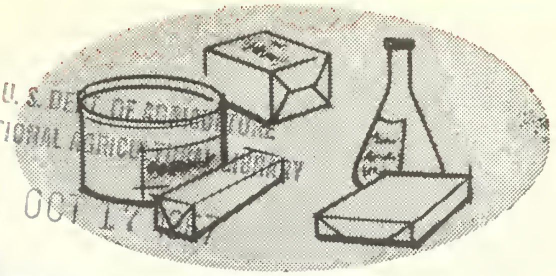

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FATS and OILS SITUATION

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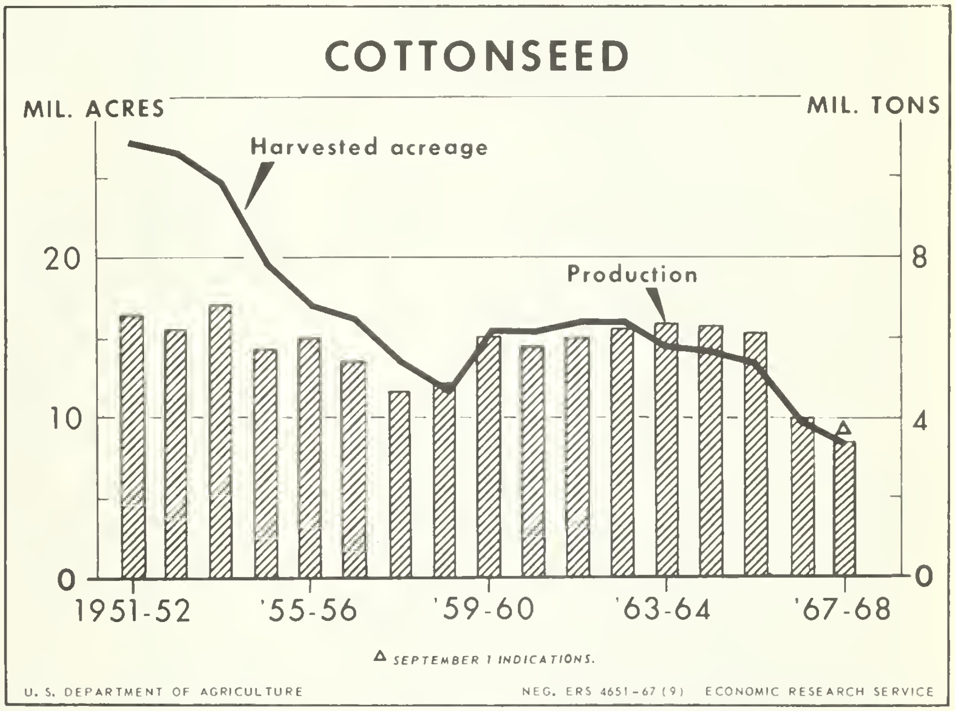
Cotton acreage in the United States has dropped 68 percent since 1951, from 26.9 million acres that year to 8.5 million in 1967. Cottonseed production has not been reduced as much because of the uptrend in yield per acre.

The 1967 cottonseed crop is estimated at 3.4 million tons--15 percent less than in 1966 and some 45 percent below 1965. The reduction reflects the heavy acreage diversion under the 1967 Upland Cotton Program, unusually large abandonment of planted acreage, and poor yield prospects. The season average price received by farmers for the 1967 cottonseed crop likely will average sharply above the support of $48 per ton but may not match the $66 received during the 1965/66 season.



U. S. DEPARTMENT OF AGRICULTURE NEG. ERS 4651-67 (9) ECONOMIC RESEARCH SERVICE

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SUNFLOWERS GAIN AS AN OILSEED CROP (Page 25)
LARD PRODUCTION TRENDS (Page 32)

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Table 1.--Wholesale and retail prices per pound for fats and oils

Item	August		1967		
	1965	1966	June	July	August *
	Cents	Cents	Cents	Cents	Cents
Wholesale Prices:					
Butter, creamery, Grade A, (92-score) bulk, New York	62.8	74.0	67.3	67.3	N.A.
Butter, creamery, Grade A, (92-score) bulk, Chicago	61.0	73.0	66.5	66.5	67.1
Butter, creamery, Grade A, (92-score) prints, San Francisco	72.3	84.8	79.8	79.8	N.A.
Castor oil, dehydrated, tanks, New York	24.0	25.0	27.0	27.0	27.0
Castor oil, No. 1, Brazilian, tanks, imported, New York	13.3	15.3	18.5	18.7	N.A.
Castor oil, No. 1, tanks, f.o.b., New Jersey mills	15.0	16.7	---	---	---
Coconut oil, crude, tank cars, Pacific Coast, f.o.b. mills 1/	14.5	13.2	13.5	13.9	N.A.
Coconut oil, crude, tanks, f.o.b. New York 1/	14.6	13.2	13.4	13.9	14.2
Coconut oil, refined, drums, l.c.l., New York 1/	22.0	20.0	21.1	21.1	21.1
Cod oil, spot, drums, New York	12.2	10.6	9.1	9.0	8.7
Codliver oil, medicinal, U. S. P., barrels, New York	19.5	19.5	19.5	19.5	19.5
Corn oil, crude, tank cars, f.o.b. Midwest mills	12.7	15.8	12.2	11.6	N.A.
Corn oil, refined, tanks, New York	15.4	19.0	15.1	14.4	14.8
Cottonseed oil, crude, tank cars, f.o.b., S. E. mills	10.5	17.0	12.2	11.9	N.A.
Cottonseed oil, crude, tank cars, f.o.b., Valley	10.5	16.6	12.1	11.8	11.8
Cottonseed oil, crude, tank cars, f.o.b., Texas	10.5	16.8	12.2	11.8	11.6
Cottonseed oil, p.s.y., bleachable, tank cars, New York 2/	12.5	18.8	13.7	13.4	13.5
Cottonseed oil, refined, tanks, New York	13.0	19.6	15.0	14.5	14.4
Degras, Lanolin technical, drums, New York	40.0	22.0	22.0	22.0	22.0
Glycerin, soaplye, tanks, New York 3/	13.4	14.9	16.2	16.2	16.2
Grease, A white, tank cars, delivered Chicago	7.3	8.2	5.7	5.4	N.A.
Grease, B white, delivered, Chicago	6.8	6.8	4.8	4.8	4.8
Grease, yellow, delivered, Chicago	6.6	6.5	4.6	4.5	N.A.
Grease, white, choice, tanks, New York	8.2	8.4	5.7	5.6	5.7
Grease oil, extra No. 1, drums, Chicago	13.5	13.5	13.5	13.5	13.5
Lard, loose, tank cars, Chicago	11.7	11.8	7.9	7.3	N.A.
Lard, prime steam, tierces, Chicago	11.7	11.8	7.8	7.2	7.8
Lard, refined, 1-pound cartons, Chicago 4/	18.5	17.6	13.5	12.9	N.A.
Linseed oil, raw, tank cars, Minneapolis	13.3	12.8	12.8	12.8	12.8
Linseed oil, raw, tanks, New York	14.3	13.9	13.9	13.9	13.9
Margarine, colored, delivered, Eastern U. S.	26.1	26.6	25.6	25.6	N.A.
Margarine, yellow, quarters, f.o.b., Chicago	25.8	25.8	25.5	25.5	25.6
Margarine, white, domestic vegetable, Chicago	23.8	22.8	22.5	22.5	22.6
Menhaden oil, crude, tanks, f.o.b., Baltimore	9.0	9.5	7.3	6.8	N.A.
Menhaden oil, light pressed, tanks, New York	11.3	11.3	10.5	10.5	10.5
Neat's foot oil, 30°, drums, carlots, New York	27.0	27.0	27.0	27.0	27.0
Oiticica oil, drums, f.o.b., New York	25.0	20.1	18.8	19.0	19.0
Oiticica oil, tanks, New York	22.8	17.8	16.8	16.9	17.0
Oleo oil, extra, drums, Chicago	18.2	19.4	19.8	19.8	19.8
Olive oil, imported, edible, drums, New York	36.3	36.7	38.0	38.0	38.0
Palm oil, clarified, drums, f.o.b. New York 5/	15.1	15.0	14.0	14.5	14.5
Palm oil, Congo, tank cars, f.o.b., New York	12.8	12.2	12.0	12.5	12.5
Palm kernel oil, bulk, c.i.f., New York 5/	15.1	12.6	12.4	12.9	13.5
Peanut oil, crude, tank cars, f.o.b. S. E. mills	12.0	15.6	11.9	11.5	11.5
Peanut oil, refined, tanks, New York	14.8	18.6	14.4	13.8	14.1
Rapeseed oil, refined (denatured), tanks, New York	15.5	15.2	15.2	15.2	15.2
Safflower oil, nonbreak, tanks, East Coast	15.8	16.8	14.6	13.9	13.6
Sesame oil, refined, drums, New York	33.0	37.0	40.8	40.8	40.8
Shortening, all vegetable, hydrogenated, 440-lb. drums, New York	23.0	23.8	20.5	20.5	N.A.
Shortening, all vegetable, hydrogenated, 3 lb. tins, delivered, Eastern U.S.	25.8	28.7	26.9	26.3	N.A.
Soybean oil, crude, tank cars, f.o.b., Decatur	10.5	14.1	9.8	9.1	N.A.
Soybean oil, refined, tanks, New York	12.4	14.2	12.1	11.3	11.8
Soybean oil, clarified, tanks, New York	12.4	15.9	12.0	13.4	11.5
Sperm oil, natural, 45°, drums, New York	14.5	14.5	14.5	14.5	14.5
Sperm oil, bleached, winter 45°, drums, New York	15.5	15.5	15.5	16.3	17.5
Tall oil, crude, tanks, works	3.5	3.1	3.1	3.1	3.1
Tall oil, refined, tanks, works	7.5	7.5	7.5	7.5	7.5
Tallow, edible, loose, Chicago	11.2	12.4	6.9	6.6	N.A.
Tallow, inedible, packers' prime, c.a.f. delivered, Chicago	7.2	7.0	5.0	4.9	5.0
Tallow, inedible, bleachable fancy, delivered, Chicago	7.7	7.6	5.2	5.2	5.2
Tallow, No. 1, inedible, delivered, Chicago	6.6	6.5	4.6	4.5	4.5
Tallow, special, inedible, tanks, delivered, New York	7.2	6.9	5.2	5.0	5.0
Tung oil, imported, drums, f.o.b., New York	28.1	22.2	14.9	14.0	13.4
Tung oil, tanks, New York	26.1	19.8	12.9	12.0	11.4
Tung oil, domestic, tanks, f.o.b. mills	26.8	24.0	24.0	24.0	24.0
Retail prices 6/					
Butter	75.0	86.3	84.1	84.0	N.A.
Margarine	27.9	28.7	28.8	28.6	N.A.
Shortening	29.2	29.8	29.6	29.6	N.A.
Salad Dressing (Italian)	74.4	75.6	75.8	75.4	N.A.
Peanut Butter	60.1	60.0	59.3	59.2	N.A.
Cooking and Salad oils	35.5	39.3	39.7	35.8	N.A.

1/ 3-cent processing tax suspended beginning October 1957.
2/ Nearby futures.
3/ Beginning January 1965, average of weekly prices, New York Journal of Commerce.
4/ Beginning April 1966, one and two pound prints.
5/ 3-cent processing tax suspended beginning July 1959.
6/ Leading cities.
*N.A.--Not available as of September 26.

THE FATS AND OILS SITUATION

Approved by the Outlook and Situation Board, September 22, 1967

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SUMMARY

Early September crop prospects indicate a total U.S. supply of edible fats, oils, and oilseeds of 19.0 billion pounds (oil equivalent of oilseeds) for the 1967/68 marketing year (starting October 1). This would be about 8 percent more than in 1966/67. Soybean and butter supplies will be larger, cottonseed oil will be down sharply, and lard may be off slightly. Soybean supplies likely will account for about two-thirds of the total edible fats and oils available during 1967/68. Domestic use and exports of food fats are expected to increase in 1967/68, but not as much as the increased supplies.

The 1967 soybean crop, as of September 1, was estimated at a record 1.0 billion bushels, compared with 932 million last year. The estimated crop plus the carryover of 91 million bushels, brings the total 1967/68 supply for the marketing year that started September 1 to about 1.1 billion bushels--13 percent more than a year earlier. Soybean utilization, which rose only slightly during 1966/67 is expected to increase more substantially above that year's record 876 million bushels (crush, exports, seed, and residual). The exact level of soybean crush and exports will depend upon such factors as soybean and soybean meal prices, our ability to export soybean oil, and competition from foreign oilseed crops.

During the peak harvesting season this fall, farm soybean prices probably will average close to the U.S. average support price of $2.50 per bushel. Processors and to some extent exporters, usually buy a sizable proportion of their year's requirements when prices are seasonally low in the fall. In past years when this has occurred, soybean utilization for the entire marketing year has expanded sharply.

The 1967 cottonseed crop is estimated at 3.4 million tons--15 percent less than in 1966, and some 45 percent below 1965. An unusually small prospective outturn this season results mostly from (1) diversion of acreage under the Upland Cotton Program; (2) heavy abandonment of planted acreage; and (3) poor yield prospects.

Cottonseed oil production during the 1967/68 marketing year that started August 1 is forecast at 1.1 billion pounds, compared with 1.3 billion last year. Domestic use is expected to approximate

the 1967 cottonseed oil output, with exports even less than the 79 million pounds shipped during 1966/67. Lower cottonseed oil production this marketing year probably will result in a continuation of about a 2-cent price premium over soybean oil.

Lard output in the 1967/68 marketing year starting October 1 is expected to decline slightly from the 2.1 billion pounds estimated for 1966/67. The prospective drop reflects a slightly smaller pig crop, along with the trend toward lower yields of lard per hog.

Flaxseed supplies for the 1967/68 marketing year that started July 1 are forecast at 28 million bushels. This would be more than a fourth less than last year and the smallest since 1938. The 1967 flaxseed crop of 19 million bushels is approximately equal to estimated domestic requirements for crushings and seed during 1967/68. Prices received by farmers during July-August 1967 averaged about $3.00 per bushel--slightly above the 1967 support rate of $2.90 per bushel. Prices are expected to continue well above support throughout the 1967/68 marketing year, because of the short domestic crop and reduced world availabilities.

U.S. sunflower oil production in 1967 is estimated at around 40-50 million pounds. This year there has been renewed interest in producing sunflowers as an oilseed crop in the Red River Valley of Minnesota and North Dakota. This is due to the availability of high oil content varieties of seed--40-44 percent oil. In the past, the domestic crop of sunflowers was used primarily for the whole seed trade and very little was processed as an oilseed. (See special article on sunflowers, starting on page 25).

REVIEW AND OUTLOOK

SOYBEANS

Growth Rate In Utilization Falls Off

The growth in soybean utilization (crushings, exports, seed, and feed) during 1953-65 has averaged 46 million bushels annually, or an annual rate of increase approximating 10 percent. This rate fell to only 4 percent during the 1966/67 marketing year just ended. Only in 1960/61 and 1963/64 was annual growth in utilization less than in 1966/67; in 1960/61 utilization was restricted by a lack of supply.

Growth in soybean utilization was limited in 1966/67 by increased U.S. soybean prices (they averaged $2.77 per bushel, compared with $2.54 in 1965/66) and increased world competition from other oilseeds, fats, and oils. Russian sunflower seed and oil gave U.S. soybeans and soybean oil exports sharp competition this past year. Russian sunflower oil exports averaged 230,000 tons in the 1963-65 period. They reached 300,000 tons in calendar 1966 and are estimated to be in the 350,000 to 400,000 range for 1967. Russian sunflower seed exports, which averaged 100,000 tons in the 1963-65 period, are expected to double that figure this year.

Soybean crushings during 1966/67 totaled 552 million bushels, compared with 538 million a year earlier. At the 1966/67 rate, the soybean industry utilized about 85 percent of its estimated processing capacity. Expanding domestic and foreign demand for soybean meal in recent years has resulted in soybean oil supplies greater than commercial domestic and export needs. The oil above commercial requirement has been largely handled at existing prices with the assistance of government concessional export programs.

Soybean exports (based on inspections) during 1966/67 totaled 262 million bushels, compared with 251 million in 1965/66. Exports to Canada and Japan were lower than in 1965/66 but Spain took considerably more U.S. soybeans. The increase occurred in the last few months of the marketing year reflecting adequate U.S. supplies and lower prices. The closing of the Suez Canal has also been a factor in increasing exports of soybeans, by

Table 2.--Soybeans: Acreage, yield and production by States, crop years 1964-67

State	Acreage harvested				Yield per acre harvested				Production				Price per bushel received by farmers			
													Season average			
	1964	1965	1966	1967 1/	1964	1965	1966	1967 1/	1964	1965	1966	1967 1/	1964	1965	1966	1967
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	Bu.	Bu.	Bu.	Bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Dol.	Dol.	Dol.	Dol.
Illinois	5,734	6,021	5,901	5,842	25.0	29.5	27.0	31.0	143.4	177.6	159.3	181.1	2.69	2.63	2.80	
Minnesota	2,852	3,166	3,356	3,658	20.0	18.5	24.0	21.0	57.0	58.6	80.5	76.8	2.60	2.65	2.70	
Indiana	2,734	2,871	2,814	2,842	24.5	28.0	26.0	26.0	67.0	80.4	73.2	73.9	2.64	2.48	2.80	
Iowa	4,254	4,850	5,092	5,652	28.5	26.0	29.5	27.0	121.2	126.1	150.2	152.6	2.57	2.61	2.75	
Missouri	2,676	3,051	3,417	3,485	21.0	26.0	25.0	22.0	56.2	79.3	85.4	76.7	2.58	2.43	2.75	
Ohio	1,825	2,044	2,105	2,231	22.5	24.5	28.5	24.0	41.1	50.1	60.0	53.5	2.66	2.59	2.80	
Arkansas	3,318	3,550	3,728	4,026	20.0	21.5	22.5	23.0	66.4	76.3	83.9	92.6	2.65	2.56	2.80	
Mississippi	1,293	1,461	1,797	2,174	19.0	22.5	24.0	25.0	24.6	32.9	43.1	54.4	2.68	2.48	2.80	
North Carolina	681	776	869	1,017	23.5	25.0	24.0	27.0	16.0	19.4	20.9	27.5	2.63	2.42	2.85	
South Carolina	677	806	879	1,046	21.5	21.0	22.0	24.0	14.6	16.9	19.3	25.1	2.59	2.53	2.80	
Tennessee	586	732	871	1,115	23.0	23.5	24.5	25.0	13.5	17.2	21.3	27.9	2.56	2.40	2.80	
Kansas	642	873	917	899	18.0	21.0	22.5	22.0	11.6	18.3	20.6	19.8	2.51	2.39	2.70	
Nebraska	523	696	786	825	22.0	23.5	29.5	24.0	11.5	16.4	23.2	19.8	2.48	2.42	2.70	
Louisiana	454	622	871	1,280	20.0	21.5	25.0	24.0	9.1	13.4	21.8	30.7	2.51	2.41	2.85	
Michigan	331	440	480	552	22.5	22.0	22.5	22.0	7.4	9.7	10.8	12.1	2.64	2.56	2.75	
Other States	2,213	2.490	2,761	3,479	18.2	21.3	20.6	23.0	40.3	53.0	58.0	78.1	2.54	2.43	2.43	
United States	30,793	34,449	36,644	40,123	22.8	24.5	25.4	25.0	700.9	845.6	931.5	1,002.6	2.62	2.54	2.77	

1/ September 1 indications.

Table 3.--Soybeans: Supply and disposition, acreage and price, marketing year beginning September 1, 1955-67

Item	Year beginning September												
	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966 1/	1967 1/
	Supply and Disposition (Million bushels)												
Supply													
Stocks, Sept. 1 2/	22.6	21.0	31.6	42.8	87.8	51.8	27.1	78.3	46.0	67.3	29.7	35.6	91
Production	373.7	449.3	483.4	580.2	532.9	555.1	678.6	669.2	699.2	700.9	845.6	931.5	4/1,003
Total supply	396.3	470.3	515.0	623.0	620.7	606.9	705.7	747.5	745.2	768.2	875.3	967.1	1,094
Disposition													
Crushings	281.9	313.6	351.0	398.8	394.0	406.1	431.4	472.8	436.8	479.0	537.5	552	
Exports	68.6	83.7	88.4	105.0	139.9	134.7	149.4	180.5	187.2	212.2	250.6	262	
Seed	25.8	26.4	29.5	27.4	29.3	32.5	33.3	34.6	36.0	40.3	42.9	47	
Feed	1.6	1.6	1.7	1.9	1.5	1.3	1.3	1.1	.9	.9	.9	1	
Residual	-2.6	13.4	1.6	2.1	4.2	5.2	12.0	12.5	17.0	6.1	7.8	14	
Total disposition	375.3	438.7	472.2	535.2	568.9	579.8	627.4	701.5	677.9	738.5	839.7	876	
Stocks, Aug. 31 2/	21.0	31.6	42.8	87.8	51.8	27.1	78.3	46.0	67.3	29.7	35.6	90.6	
	Acreage and Yield (Million acres)												
Acreage grown alone	19.7	21.7	21.9	25.1	23.3	24.4	27.8	28.4	29.5	31.6	35.2	37.4	41.0
Acreage harvested 3/	18.6	20.6	20.9	24.0	22.6	23.7	27.0	27.6	28.6	30.8	34.4	36.6	40.1
Percent harvested (%)	94.4	94.9	95.4	95.6	97.0	97.1	97.1	97.2	96.9	97.2	97.7	97.9	97.8
	(Bushels)												
Yield per acre harvested	20.1	21.8	23.2	24.2	23.5	23.5	25.1	24.2	24.4	22.8	24.5	25.4	25.0
	Price (Dollars)												
Price per bushel													
Support	2.04	2.15	2.09	2.09	1.85	1.85	2.30	2.25	2.25	2.25	2.25	2.50	2.50
Received by farmers	2.22	2.18	2.07	2.00	1.96	2.13	2.28	2.34	2.51	2.62	2.54	2.77	
No. 1 yellow, Ill. Pts.	2.51	2.33	2.20	2.12	2.07	2.53	2.41	2.50	2.59	2.81	2.91	2.86	
No. 1 yellow, Chicago	2.59	2.43	2.28	2.22	2.17	2.60	2.49	2.59	2.67	2.88	2.98	2.93	

1/ Preliminary. 1967 disposition is forecast. 2/ Estimates prior to 1965. For method, see August 1965 FOS-229, table 2, page 6.
3/ For beans. 4/ Indicated September 1.

restricting the movement of other oil-bearing materials from the East to Western Europe.

Prices May Average Near Support With Record 1967/68 Supply

The soybean carryover on September 1, 1967, was 91 million bushels, compared with 36 million on September 1, 1966. This was close to the previous high of 88 million on September 1, 1959. Total U.S. supplies of soybeans for the 1967/68 marketing year starting September 1 are estimated at 1,094 million bushels--about 127 million more than last fall. Soybean acreage to be harvested for beans is up 10 percent, while September 1 yield prospects--at 25.0 bushels--are slightly below 1966.

During the peak harvesting season this fall, farm soybean prices probably will average around the U.S. support rate of $2.50 per bushel. Processors, and to some extent exporters, usually buy a sizable proportion of their year's requirements when prices are seasonally low. When this has occurred in recent years, soybean utilization has expanded sharply.

The USDA announced on August 29, 1967, that 1966-crop soybeans acquired under the price-support program will not be offered for general sale at least during the harvesting period. About 7½ million bushels of 1966-crop warehouse-stored soybeans were acquired on the loan maturity date of July 31, 1967.

Soybean crushings in 1967/68 are expected to increase somewhat from the 552 million bushels for the year just ended. The exact level will depend upon such factors as competition from foreign crops and our ability to export soybean oil.

Soybean meal demand in 1967/68 likely will again outpace soybean oil demand--resulting in a sizable oil surplus. Domestic use of soybean oil will be greater than last year, since cottonseed oil and, possibly, lard production will be smaller. Even so, total edible vegetable oil exports would have to exceed the 1¼ billion pounds estimated for 1966/67 in order to avoid a buildup in oil inventories.

The prospective lower prices for soybean oil (and meal) in 1967/68 may make U.S. oil more competitive.

Soybean exports in 1967/68 probably will increase from the estimated 262 million bushels in 1966/67, mainly because of lower U.S. prices and slightly reduced world supplies of other competitive fats and oils.

Prospects for gains in domestic use and exports point to some further buildup in soybean carryover next fall. A better evaluation of the prospective 1967/68 supply-use situation can be made when more information is available on the soybean crop and world oilseed conditions in mid-November.

Longer Term Price Trends

In most years since 1953, the U.S. season average price received by farmers has been somewhat above CCC support. The season average price of soybeans has trended upward from $1.96 per bushel in 1959 (when the support was $1.85) to $2.77 in 1966 (support at $2.50)--an increase of over 40 percent.

During the 1959-66 period, soybean oil prices at Decatur varied widely between 8 and 12 cents per pound, but showed no trend and averaged about 10 cents per pound. On the other hand, meal prices at Decatur (bulk, 44 percent protein) rose fairly steadily from $55 per ton in 1959 to around $80 in 1965 and 1966. Soybean meal now accounts for about 60 percent of the value of soybean products.

Processing margins (based on spot prices) during 1959-66 varied between 5 cents (1963) and 26 cents (1965) per bushel, averaging 12 cents. The soybean processing industry has steadily increased its plant capacity from 320 million bushels in 1953 to about 650 million in 1966. Processing capacity has exceeded actual crushings by about 20 percent despite the sharp uptrend in soybean production. Soybean processing capacity

Table 4.--Soybeans: Crushings and yields of oil and meal per bushel crushed exports and price, by months, crop years, 1955-66

Year beginning September	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Year
							Crushings						
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
1955	18.7	25.4	25.4	23.9	24.4	24.5	25.4	25.3	24.6	22.2	20.4	21.8	281.9
1956	19.9	27.9	26.6	27.0	28.4	26.6	28.9	27.3	26.5	24.7	24.4	25.4	313.6
1957	22.2	28.1	29.2	28.4	31.1	27.1	30.8	31.5	32.2	28.7	30.0	31.6	350.9
1958	25.1	33.5	33.5	34.4	36.7	34.0	36.0	34.6	36.4	33.2	31.9	29.6	398.8
1959	27.5	35.3	36.1	34.1	34.1	30.9	34.8	33.2	33.2	31.3	31.4	32.1	394.0
1960	26.9	35.6	37.1	38.1	39.0	34.6	34.8	33.0	34.3	31.9	31.0	30.0	406.1
1961	23.0	36.5	38.5	38.7	41.0	36.3	38.8	36.5	38.6	34.3	34.8	34.4	431.4
1962	30.4	39.9	42.8	42.8	42.8	38.8	41.9	36.0	41.1	39.0	38.2	39.0	472.7
1963	32.2	40.5	39.4	39.2	36.0	34.6	33.8	35.3	36.3	35.0	37.3	37.2	436.8
1964	36.3	44.3	43.6	43.2	43.0	37.8	40.8	38.2	40.9	37.1	36.6	37.1	479.0
1965	30.4	44.1	48.2	48.9	50.2	45.1	49.4	43.9	50.1	44.7	42.0	40.4	537.5
1966 1/	35.3	45.2	49.6	48.9	50.1	44.0	46.4	46.8	47.7	47.5	45.8	44.8	551.9
							Yield of oil per bu. crushed						
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
1955	11.0	11.0	10.9	11.0	11.0	11.1	11.1	11.1	11.1	11.2	11.2	11.4	11.1
1956	11.1	10.8	10.7	10.7	10.7	10.8	10.8	10.9	10.9	11.0	11.0	10.9	10.9
1957	11.0	10.9	10.7	10.6	10.6	10.7	10.7	10.7	10.8	10.8	10.9	10.8	10.8
1958	10.8	10.5	10.5	10.4	10.5	10.5	10.6	10.6	10.6	10.7	10.8	10.8	10.6
1959	10.8	11.1	10.9	11.0	10.9	10.9	10.9	11.1	11.0	11.1	11.2	11.2	11.0
1960	11.1	11.0	10.9	10.9	10.9	10.9	11.0	11.0	11.0	11.1	11.1	11.1	11.0
1961	11.0	10.9	10.8	10.8	10.8	10.9	10.9	10.9	11.0	11.0	11.0	11.0	10.9
1962	11.0	10.7	10.6	10.5	10.7	10.6	10.8	10.7	10.8	10.8	10.8	10.9	10.7
1963	10.7	10.9	10.8	10.8	10.8	10.9	10.9	10.9	11.0	11.0	11.0	11.1	10.9
1964	11.0	10.9	10.7	10.8	10.8	10.8	11.0	10.9	11.0	10.9	11.0	11.0	10.9
1965	10.8	10.8	10.6	10.6	10.6	10.6	10.7	10.7	10.7	10.8	10.8	10.8	10.7
1966 1/	10.8	10.7	10.5	10.5	10.6	10.7	10.7	10.8	10.8	10.8	10.8	10.9	10.7
							Yield of meal per bu. crushed						
1955	45.9	45.7	46.0	45.4	46.4	45.9	46.1	46.2	46.4	46.5	46.6	47.1	46.2
1956	46.2	47.1	47.5	47.7	47.5	47.3	47.6	47.6	48.1	48.0	47.9	47.6	47.5
1957	46.5	46.4	46.7	46.7	46.7	46.4	46.6	46.9	47.1	46.6	47.7	46.8	46.8
1958	47.2	46.9	47.1	47.5	47.6	47.1	47.5	47.2	47.1	47.5	47.7	48.1	47.3
1959	47.1	46.5	46.5	46.7	46.4	46.2	46.0	46.4	46.3	46.8	46.7	46.9	46.5
1960	46.8	46.7	47.0	47.1	47.2	46.9	47.0	46.9	46.6	47.1	47.3	47.1	47.0
1961	47.3	46.7	46.9	47.1	46.9	47.2	46.9	47.0	47.2	47.2	47.4	47.5	47.2
1962	47.5	46.6	47.0	46.7	47.0	46.9	46.7	46.8	47.0	47.1	47.0	47.2	46.9
1963	46.9	47.7	47.7	47.6	47.9	47.9	47.9	47.6	48.3	48.5	49.1	49.0	48.0
1964	48.3	47.5	47.8	47.8	47.8	47.7	48.1	47.6	47.6	47.5	47.7	48.0	47.8
1965	47.6	46.5	47.8	47.5	47.5	47.6	47.5	47.4	47.4	47.9	47.6	48.1	47.5
1966 1/	48.3	47.4	47.3	47.6	47.5	47.8	47.9	47.5	47.8	47.8	47.6	48.2	47.7
							Exports						
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
1955	4.0	8.8	13.2	12.7	6.8	2.6	1.9	5.1	4.3	3.7	3.7	1.7	68.6
1956	2.9	10.2	10.5	15.9	7.8	4.2	5.4	5.7	5.1	3.5	4.6	7.8	83.7
1957	4.5	9.9	15.6	13.7	7.2	3.9	3.8	5.1	6.6	5.1	6.4	6.5	88.4
1958	1.6	12.1	15.8	10.2	9.3	8.4	5.0	9.4	9.2	8.9	9.8	5.2	105.0
1959	6.7	12.1	20.4	18.1	10.3	7.7	7.2	8.1	14.4	11.8	9.2	13.9	139.9
1960	8.2	14.1	22.7	20.6	9.1	10.2	8.5	7.7	11.4	7.7	7.7	7.0	134.9
1961	3.6	20.7	23.6	16.5	10.9	10.3	11.0	11.7	12.7	11.9	8.1	8.4	149.4
1962	7.3	22.4	27.4	18.7	3.7	19.3	14.4	14.1	11.6	15.6	14.3	11.8	180.5
1963	7.2	19.8	21.3	21.8	17.0	16.2	13.6	17.6	14.0	13.0	11.9	13.7	187.2
1964	11.1	29.5	27.4	24.4	2.9	11.3	25.0	17.6	17.8	16.1	17.4	11.7	212.2
1965	4.8	32.3	39.4	31.4	19.6	17.1	21.6	20.2	21.5	19.6	12.1	11.1	250.6
1966 1/	5.5	29.3	40.6	27.6	21.9	20.4	17.5	21.6	20.3	19.5	16.8		
							Average price per bu. received by farmers, United States 2/						
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
1955	2.00	2.08	2.06	2.11	2.19	2.25	2.38	2.63	2.98	2.87	2.47	2.33	2.22
1956	2.07	2.07	2.27	2.27	2.31	2.25	2.26	2.24	2.23	2.18	2.24	2.27	2.18
1957	2.13	2.04	2.04	2.06	2.05	2.05	2.10	2.16	2.13	2.13	2.11	2.11	2.07
1958	1.98	1.93	1.89	1.97	2.02	2.05	2.07	2.10	2.13	2.09	2.05	1.98	2.00
1959	1.90	1.93	2.00	1.98	2.01	1.99	1.99	2.02	2.00	1.97	1.97	1.99	1.96
1960	1.97	1.94	1.96	1.99	2.23	2.48	2.68	3.02	2.96	2.60	2.48	2.49	2.13
1961	2.24	2.20	2.27	2.30	2.32	2.32	2.34	2.38	2.36	2.34	2.35	2.33	2.28
1962	2.25	2.23	2.30	2.35	2.41	2.50	2.51	2.45	2.47	2.48	2.44	2.45	2.34
1963	2.44	2.56	2.66	2.58	2.65	2.57	2.55	2.45	2.36	2.35	2.34	2.35	2.51
1964	2.51	2.55	2.57	2.71	2.73	2.81	2.85	2.85	2.72	2.74	2.69	2.53	2.62
1965	2.35	2.31	2.36	2.48	2.67	2.77	2.71	2.78	2.90	3.04	3.37	3.49	2.54
1966 1/	2.98	2.78	2.80	2.82	2.77	2.71	2.74	2.71	2.69	2.71	2.66	2.56	2.77

1/ Preliminary. 2/ Season average price includes an allowance for unredeemed loans and purchase agreement deliveries by States.

again is being expanded and probably will exceed 700 million bushels in 1967/68.

SOYBEAN OIL

Domestic Use Up Slightly

The total supply of soybean oil for the 1966/67 marketing year ending September 30 is estimated at 6.4 billion pounds, compared with 6.1 billion in 1965/66. Domestic use is placed around 4.8 billion pounds, and exports are expected to be 1.2 billion pounds.

Domestic disappearance of soybean oil during October-July 1966/67 totaled 3,940 million pounds, compared with 3,928 million a year earlier (table 5). During October-December, the monthly disappearance rate was sharply ahead of last year's, but since then, the rate of gain has dropped. Part of this may be due to increased usage of peanut oil, edible tallow, safflower oils, palm kernel oil, and palm oil. During October-July 1966/67, the combined increase in domestic use of these oils over a year earlier was about 159 million pounds. Domestic use of lard during the same period was up about 116 million pounds, with most of the increase in shortening manufacture. Less soybean oil has been used in shortening this year, reflecting increased competition from lower-priced lard, edible tallow, and imported palm oils. Both lard and soybean oil prices are lower this year than last, but lard has shown the sharpest drop.

Exports of soybean oil during October-July 1966/67 totaled 897 million pounds, compared with 731 million a year earlier. Larger exports under Government programs are more than offsetting a drop in dollar sales which had met increased competition from Russian sunflower oil. Increased soybean oil exports through July went mainly to India, Tunisia, Yugoslavia, and Egypt. Exports to Iran, Pakistan, and Columbia have been smaller this year than last. Soybean oil exports during August-September 1967 apparently exceeded last year's 191 million pounds in the same 2 months.

Since 1954, the first year of P.L. 480, edible vegetable oils (soybean and cottonseed) have been declared eligible for export under the program. In comparison soybeans and soybean meal have not been in surplus or generally available for programming under P.L. 480. During 1954-66, P.L. 480 exports of edible oils accounted for 55 percent of the total U.S. oil exports. In the last 2 years, however, the P.L. 480 program accounted for a much larger share of the total exports--about 70 percent in 1965-66 and 85 percent in 1966-67. This largely reflects a sharp drop in U.S. commercial exports of the edible oils.

Stocks of soybean oil (crude and refined) have increased from 462 million pounds on October 1, 1966, to 638 million on August 1, 1967. Stocks on August 1 last year were 598 million pounds. Soybean oil stocks usually decline in August-September as crushings decline seasonally.

Soybean oil prices (crude, Decatur) drifted downward from 10.9 cents per pound in October 1966 to 10.3 cents in January 1967, and held steady at this level through May. Prices declined further in June, after the closing of the Suez Canal, and averaged 9.1 cents in July. Soybean oil prices in mid-September were 9.3 cents per pound, about 3 cents below September 1966.

SOYBEAN MEAL

Domestic Use Up 3 Percent; Exports May Match Last Year's Record

Soybean meal production for the marketing year ending September 30, 1967, is estimated at 13.2 million tons--slightly above the 12.9 million in 1965/66 (Table 5). Domestic use is placed at 10.6 million tons, compared with 10.2 million in 1965/66. Exports are expected to equal 1965/66 record of 2.6 million tons.

Domestic disappearance of soybean meal during October-July 1966/67 totaled 8.9 million tons--an increase of 3 percent over a year earlier. The main factors contributing to increased usage this year are the sharp reduction in cottonseed meal

Table 5.-- Soybean oil and meal: Supply and disposition, crop years, 1958-66

Item	Year beginning October									
	1958	1959	1960	1961	1962	1963	1964	1965	1966 1/	Forecast 1967
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
SOYBEAN OIL	Soybean oil									
Supply										
Stocks, October 1	281	298	308	677	618	920	578	297	462	512
Production	4,251	4,338	4,420	4,790	5,091	4,822	5,146	5,800	5,950	
Total supply	4,532	4,636	4,728	5,467	5,709	5,742	5,724	6,097	6,412	
Disposition										
October-July										
Domestic disappearance	2,710	2,801	2,752	2,937	3,081	3,322	3,384	3,928	3,940	
Exports	692	727	615	1,036	934	847	1,090	751	920	
Stocks, August 1	464	452	773	780	921	759	499	598	638	
August-September										
Domestic disappearance	594	575	577	603	543	736	685	760	810	
Exports 3/	238	226	106	272	231	259	267	196	230	
Season totals										
Domestic disappearance	3,304	3,376	3,329	3,540	3,624	4,058	4,069	4,688	4,750	
Exports 3/	930	953	721	1,308	1,165	1,106	1,357	947	1,150	
Total distribution	4,234	4,329	4,050	4,848	4,789	5,164	5,426	5,635	5,900	
Stocks, September 30	298	308	677	618	920	578	297	462	512	
Price per pound	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Crude, tanks, Decatur	9.5	8.3	11.3	9.5	8.9	8.5	11.4	11.8	10.1	
SOYBEAN MEAL	Soybean meal									
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Supply										
Stocks, October 1 4/	48	58	83	78	94	159	122	106	132	132
Production	9,490	9,152	9,452	10,342	11,127	10,609	11,286	12,901	13,250	
Total supply	9,538	9,210	9,535	10,420	11,221	10,768	11,408	13,007	13,382	
Disposition										
October-July										
Feed 6/	7,621	7,143	7,557	7,855	8,121	7,673	7,773	8,635	8,884	
Exports	436	556	516	924	1,295	1,164	1,827	2,331	2,319	
Stocks, August 1	122	130	211	101	128	144	195	219	164	
August-September										
Feed 6/	1,347	1,336	1,310	1,407	1,465	1,495	1,470	1,584	1,716	
Exports	76	93	74	140	181	314	232	325	331	
Season totals										
Feed 6/	8,968	8,479	8,867	9,262	9,586	9,168	9,243	10,219	10,600	
Exports	512	649	590	1,064	1,476	1,478	2,059	2,656	2,650	
Total distribution	9,480	9,128	9,457	10,326	11,062	10,646	11,302	12,875	13,250	
Stocks, September 30 4/	58	83	78	94	159	122	106	132	132	
Price per ton	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Bulk, Decatur	55.80	55.55	60.60	63.60	71.30	71.00	70.20	81.50	79.00	

1/ Preliminary.
2/ Based on a soybean oil yield of 10.7 pounds per bushel.
3/ 1960-64 includes estimates of foreign donations not reported by Census.
4/ Stocks at processors' plants.
5/ Based on a soybean meal yield of 47.7 pounds per bushel.
6/ Includes small quantities used for industrial purposes, estimated at 30,000 tons annually.

supplies, and increases in poultry, hogs, and cattle on feed. Factors tending to limit oilseed meal usage include less favorable livestock-feed price ratios, increased imports of competitive fish meal, as well as the continuing increase in use of urea. U.S. imports of fish meal (mainly from Peru and Chile) totaled 440,000 tons during October-July 1966/67--up 65 percent from the 267,202 tons the previous year.

Soybean meal exports during October-July 1966/67 totaled 2.3 million tons--the same as in 1965/66. Exports lagged behind year-earlier levels, until a sharp pickup this summer. Soybean meal exports to Western Europe (which accounts for about three-fourths the total) are down slightly this year, but this has been offset by larger exports to Eastern Europe.

Soybean meal prices (44 percent protein, bulk, Decatur) declined from $82 per ton in October 1966 to $74 in April and May 1967. Prices jumped to $80 in early June during the Mid-East war, and remained near this level. Soybean meal prices are expected to ease downward this fall when soybean crushings from the record crop pick up seasonally.

COTTONSEED

1967 Crop Down 15 Percent; Acreage Smallest Since 1871

Based on average bale weight and seed-lint ratios, the 1967 cottonseed crop was estimated, as of September 1, at 3.4 million tons. This is 15 percent less than 1966, and 45 percent below 1965. With more cotton acres diverted this year than in 1966, and with one of the worst planting seasons of record in many areas, total plantings this year were limited to about 9.7 million acres. Abandonment of planted acreage is estimated at 12.1 percent, compared with 7.7 percent last year. About 8.5 million acres will be harvested--11 percent less than in 1966 and the lowest since 1871. The estimated cottonseed yield per acre for the 1967 crop, as of September 1, was 787 pounds, compared with 829 in 1966.

Total supplies of cottonseed in 1967/68 (carryover stocks on August 1 plus production) are estimated at 3.6 million tons--14 percent below last year and 44 percent below 1961-1965 (table 7). Crushings for the 1967/68 season are forecast at 3.2 million tons, compared with 3.8 million in 1966/67. A crush this size would produce around 1.1 billion pounds of crude cottonseed oil--about 15 percent less than the season before. Cake and meal output would be around 1.5 million tons, compared with 1.8 million in 1966/67.

Prices to farmers for the 1967 cottonseed crop are being supported at $48 per ton, basis (100) grade, the same as in 1966. The cottonseed price support is carried out primarily by means of a product purchase program through oil mills (which agree to pay not less than support for cottonseed at cotton gins). Tenders of products from participating oil mills will be received through July 1968, or a later date approved by CCC. The prospective 1967/68 supply and demand situation for cottonseed oil and meal indicates that no purchases of the oil appear likely during the year. There have been no CCC purchase of cottonseed oil under the cottonseed price support program since 1963.

The season average price received by farmers for the 1967 crop of cottonseed probably will average sharply above support of $48 per ton but may not match the $65.90 per ton of the 1965/66 season.

COTTONSEED OIL

Supply Down 11 Percent From 1966/67

Total supply of cottonseed oil for the 1967/68 marketing year that started August 1 is estimated at 1.4 billion pounds, compared with 1.6 billion last year. The decline is due to reduced output (table 8). Domestic use of cottonseed oil is forecast at 1.1 billion pounds--approximately equal to the 1967/68 output, and the smallest since 1958/59. Exports probably will be even less than the 79 million pounds shipped abroad in 1966/67.

Cooking and salad oil are major outlets for cottonseed oil, accounting for

Table 6.--Cottonseed: Acreage, yield and production, by States, crop years 1965-67

State	Cotton acreage			Cottonseed yield per acre harvested			Cottonseed production		
	Harvested		For harvest						
	1965	1966	1967	1965	1966	1967 1/	1965	1966	1967 1/
	1,000 acres	1,000 acres	1,000 acres	Lb.	Lb.	Lb.	1,000 tons	1,000 tons	1,000 tons
Texas	5,565	3,968	3,700	694	665	632	1,900	1,320	1,170
Mississippi	1,430	995	940	1,150	1,132	1,000	826	563	470
Arkansas	1,205	865	790	983	728	732	592	315	289
California	725	618	590	1,898	1,618	1,661	683	500	490
Alabama	809	564	460	843	674	526	342	190	121
Arizona	340	252	247	1,918	1,667	1,652	324	210	204
Georgia	577	380	285	787	684	618	227	130	88
Tennessee	499	365	260	1,022	822	708	255	150	92
South Carolina	489	305	200	818	767	730	200	117	73
Louisiana	498	357	340	916	1,036	988	228	185	168
Oklahoma	555	380	405	544	474	435	151	90	88
Missouri	334	190	90	958	716	511	160	68	23
North Carolina	368	155	90	484	503	444	89	39	20
New Mexico	173	134	128	1,098	1,119	969	95	75	62
Other States	48	26	20	625	615	600	15	8	6
United States	13,615	9,554	8,545	894	829	787	6,087	3,960	3,364

1/ Indicated September 1, based on average seed--lint ratio.

Table 7.--Cottonseed: Supply and disposition, crop years, 1960-67

Item	Year beginning August							
	1960	1961	1962	1963	1965	1965	1966 1/	1967 2/
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Supply:								
Stocks August 1	105	188	280	234	168	156	204	208
Production	5,886	5,978	6,139	6,192	6,237	6,087	3,960	3,364
Total supply	5,991	6,166	6,419	6,426	6,405	6,243	4,164	3,572
Disposition:								
Crushed	5,352	5,539	5,833	5,887	5,926	5,734	3,791	3,200
Exports	5	7	10	8	7	9	5	
Seed	281	254	232	234	222	153	142	
Residual 3/	165	86	110	129	94	143	19	
Total disposition	5,803	5,886	6,185	6,258	6,249	6,039	3,956	
Ending stocks:	188	280	234	168	156	204	208	
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Price per ton								
Support to farmers 4/	34.00	45.00	44.00	44.00	44.00	43.00	48.00	48.00
Received by farmers	42.60	51.10	47.90	50.70	47.10	46.70	65.90	
Price and value of products								
Meal, per ton 5/	55.12	59.25	65.60	63.35	59.90	68.80	78.55	
Hulls, per ton 6/	7.00	10.00	15.00	15.00	15.00	18.00	22.00	
	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.
Oil, per pound 7/	11.6	12.4	10.4	9.9	11.5	12.8	12.9	
Linter, per pound 8/	4.1	5.2	3.8	3.5	3.8	4.2	6.6	
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Combined value 9/	73.89	80.21	75.42	72.27	76.91	86.10	97.74	

1/ Preliminary and partly estimated. 2/ Forecast based on September 1 indications. 3/ Includes feed, fertilizer, and loss. 4/ Purchase price. 5/ 41-percent protein, bulk, carlots, Memphis. 6/ Carload lots, Valley. Estimated. 7/ Crude, f.o.b. Valley. 8/ Weighted average price for all grades and market points, f.o.b. mill. 9/ Combined value of product per ton crushed.

about three-fifths of total domestic use. Shortening comprises over a fifth; and margarine, and industrial products mainly from foots account for the remainder (table 9). Use of cottonseed oil in the manufacture of shortening and margarine probably will be even lower than in 1966/67 because its 2-cent price premium over soybean oil is expected to continue. Manufacturers of cooking and salad oils have been turning more to blended vegetable oils or switching to lower-priced soybean oil in order to remain competitive. Because of the inelastic demand for brand-name products, some manufacturers have used imported oils.

Cottonseed oil imports during the August-July 1966/67 season totaled 17 million pounds (mainly from Russia and Nicaragua). These were the first recorded cottonseed oil imports since 1952. (There is a 3-cent duty on cottonseed oil imported into the United States.)

Cottonseed oil prices (crude, tanks, Valley) declined from 16.6 cents per pound in August 1966 to 12.0 cents in January 1967 and held steady at this level through July. The 1966/67 marketing year average was 12.9 cents, or about the same as in 1965/66. Prices in August 1967, the first month of the current marketing year, averaged 11.8 cents per pound. For all of 1967/68, cottonseed oil prices probably will average slightly below the 1966/67 average of about 13 cents per pound. The price differential between cottonseed oil and soybean oil is expected to be the narrowest this fall when the supply of both oils become seasonally high.

The 1966/67 season's average cottonseed meal price (41 percent protein, bulk, Memphis) was $79 per ton--about $10 above 1965/66 and the highest since 1951/52. The sharp cutback in 1966/67 cottonseed meal supplies reduced the quantity fed to 1.8 million tons, compared with 2.7 million in 1965/66.

LARD

Production Up 10 Percent; Prices Well Below Last Year

Commercial lard production during October-August 1966/67 is estimated at 1,850 million pounds, compared with 1,688 million a year earlier. Hog slaughter was up about 16 percent during this period, but lard yield per hog was down over a pound. Lard output (including farm) for the entire 1966/67 marketing year is estimated at 2,050 million pounds, compared with 1,900 million the previous year.

Domestic disappearance of commercial lard during October-July 1966/67 was 1,437 million pounds--about 9 percent more than the previous year. Direct use of lard was 4 percent below last year, but this was more than offset by a sharp increase of lard used in manufactured products. Lard used in shortening totaled 453 million pounds during October-July up 20 percent from last year. Use of lard in margarine was 104 million pounds--an increase of 112 percent. Lard prices this year have been substantially below those of competitive edible vegetable oils. For all of 1966/67, total domestic disappearance is placed near 1,800 million pounds--about a tenth above 1965/66. Lard stocks on August 1, 1967, totaled 118 million pounds--25 percent above the 94 million pounds the same date last year.

Lard exports and shipments totaled 207 million pounds during October-July 1966/67, compared with 185 million for the same 9 months in 1965/66. The increase went mainly to the United Kingdom, which took 107 million pounds this year, compared with 84 million a year ago. U.S. lard prices this year have remained more competitive with Continental lard. Total lard exports and shipments for the entire 1966/67 marketing year are estimated around 250 million pounds, compared with 218 million a year ago.

Lard prices (tanks, loose, Chicago) dropped from 10.7 cents per pound in October 1966 to 7.3 cents in July 1967. Prices rose to 7.8 cents in August, but in mid-September were back down to 7.5 cents. The October-July 1966/67 average was 8.9 cents per pound--nearly 3 cents below the year before. The decline reflects the increased lard production this year and larger stocks, along with the general price decline in food fats and oils. Lard prices probably will continue below last year's.

Table 8.--Cottonseed oil: Supply and disposition and oil equivalent of exports of cottonseed, 1947-67

Year beginning August	Supply				Disposition		Cottonseed (oil equivalent of exports)
	Production	Imports	Stocks, August 1	Total	Exports	Domestic disappearance	
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1947	1,276	4	186	1,466	33	1,313	2
1948	1,704	1/	120	1,824	82	1,558	2
1949	1,847	---	185	2,032	147	1,670	3
1950	1,197	---	215	1,412	61	1,184	2
1951	1,751	---	167	1,918	120	1,396	3
1952	1,825	1/	402	2,227	55	1,202	4
1953	2,074	---	971	3,045	351	1,698	5
1954	1,735	---	996	2,731	684	1,650	7
1955	1,894	---	398	2,292	634	1,375	5
1956	1,685	---	284	1,969	434	1,333	4
1957	1,438	---	202	1,640	286	1,186	2
1958	1,518	---	168	1,686	342	1,132	2
1959	1,861	---	212	2,073	522	1,263	3
1960	1,808	---	287	2,095	2/390	1,455	2
1961	1,865	---	250	2,115	2/470	3/1,430	2
1962	1,942	---	324	2,266	2/374	1,379	3
1963	1,981	---	514	2,495	2/483	1,387	3
1964	1,999	---	624	2,624	2/701	3/1,611	2
1965	1,896	---	421	2,317	348	1,668	3
1966 4/	1,261	5/17	301	1,579	79	1,201	2
1967 6/	1,075		299			1,100	

1/ Less than 500,000 pounds. 2/ Includes estimates of foreign donations not reported by Census; beginning January 1965 foreign donations reported by Census. 3/ Factory consumption figures used for years in which reported factory consumption exceeds domestic disappearance. 4/ Preliminary and partly estimated. 5/ Includes 7 million pounds imported in July 1967 not shown in Census report. 6/ Forecast, except stocks, Aug. 1. Totals computed from unrounded numbers.

Table 9.--Cottonseed oil: Utilization, year beginning August, 1947-66

Year beginning August	Food uses					Nonfood uses				Total domestic disappearance
	Shortening	Margarine	Salad and cooking oils	Other	Total	Soap	Foots and loss	Other	Total	
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1947	312	434	477		1,224	1/	84	4	89	1,313
1948	470	448	507		1,425	1	127	5	133	1,558
1949	583	451	469		1,503	0	158	8	166	1,670
1950	356	322	399		1,077	1/	98	9	107	1,184
1951	412	392	463		1,267	1/	123	6	129	1,396
1952	329	283	459		1,071	1/	125	4	129	1,202
1953	573	354	629		1,556	1/	132	4	136	1,698
1954	547	328	669		1,544	1/	99	6	105	1,650
1955	354	286	611		1,251	0	115	9	124	1,375
1956	286	273	689		1,247	0	78	8	86	1,333
1957	247	163	665		1,075	0	105	7	112	1,186
1958	233	124	640	39	1,036	0	89	7	96	1,132
1959	332	122	670	20	1,144	0	115	4	119	1,263
1960	380	158	775	7	1,320	0	127	7	134	1,455
1961	356	110	847	10	1,323	0	101	7	108	2/1,430
1962	340	103	732	85	1,260	0	112	6	118	1,379
1963	351	103	808	19	1,281	0	95	11	106	1,387
1964	365	102	1,000	20	1,487	0	107	16	123	2/1,611
1965	453	119	957	27	1,557	0	101	10	111	1,668
1966 3/	286	90	719	25	1,120	0	72	8	80	1,201

1/ Less than 500,000 pounds. 2/ Factory consumption figures used for years in which reported factory consumption exceeds domestic disappearance. 3/ Preliminary.
Totals computed from unrounded numbers.

Table 10.--Cottonseed: Crushings and yields of oil and meal per ton crushed, and price, by months, crop years 1953-66

Year beginning August	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Total
							Crushings						
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
1953	182	511	781	768	726	721	633	607	480	361	275	211	6,256
1954	251	532	684	659	609	598	514	438	318	285	197	165	5,249
1955	212	494	708	781	672	692	618	497	387	258	151	119	5,588
1956	182	526	723	678	572	613	492	400	280	226	148	120	4,959
1957	142	348	648	613	544	523	409	327	255	180	127	132	4,247
1958	148	307	711	590	547	547	440	433	324	179	117	97	4,439
1959	149	502	778	723	656	633	577	528	374	252	177	143	5,491
1960	140	413	758	742	613	667	526	480	402	292	176	143	5,352
1961	144	334	750	753	629	659	598	539	437	298	215	183	5,539
1962	228	513	752	778	646	707	627	548	415	291	176	153	5,833
1963	221	485	726	745	637	697	616	544	451	348	242	174	5,887
1964	170	392	679	733	705	683	612	630	472	382	260	206	5,926
1965	152	411	644	716	701	714	655	608	415	333	228	156	5,734
1966 1/	152	205	506	550	530	503	379	381	217	133	144	92	3,791
							Yield of oil per ton crushed						
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
1953	316	309	324	328	324	330	333	336	345	349	351	373	332
1954	332	311	321	327	324	328	331	345	348	358	341	345	331
1955	332	323	334	336	337	334	342	343	352	354	360	367	339
1956	320	314	335	339	337	339	347	349	358	363	365	356	340
1957	341	331	345	334	333	334	345	341	343	343	340	341	339
1958	326	314	336	343	337	344	347	344	360	365	356	359	342
1959	337	326	336	336	336	335	341	343	350	344	354	359	339
1960	349	323	340	336	336	336	340	340	343	345	343	336	338
1961	339	327	340	341	334	333	336	338	335	330	348	347	337
1962	329	326	327	332	330	329	333	338	341	348	354	335	333
1963	319	323	336	338	333	332	336	342	343	342	358	348	336
1964	329	324	325	332	332	333	336	338	348	353	358	352	337
1965	329	323	329	330	329	326	328	332	335	340	356	325	331
1966 1/	322	331	327	333	331	334	334	338	341	325	345	327	333
							Yield of meal per ton crushed						
1953	951	947	955	947	952	946	950	935	944	909	937	998	946
1954	971	979	966	972	966	981	991	1,000	969	981	968	947	976
1955	974	944	928	949	943	928	931	926	926	956	985	1,051	942
1956	939	946	960	969	962	957	972	963	975	999	987	978	964
1957	1,000	963	928	918	910	913	917	915	921	905	877	901	922
1958	940	881	940	950	952	922	917	902	937	959	945	934	929
1959	939	906	925	931	925	916	928	934	940	926	940	981	928
1960	981	917	929	931	938	930	941	936	942	944	966	931	936
1961	950	895	906	911	912	908	898	901	879	879	928	929	905
1962	905	927	933	941	936	926	940	940	950	952	985	942	937
1963	914	923	954	949	957	937	950	953	944	949	965	1,006	948
1964	972	928	933	925	922	923	927	935	943	951	970	959	935
1965	946	930	924	945	949	935	932	945	951	944	961	929	940
1966 1/	930	989	940	946	941	944	945	966	986	947	939	958	950
							Average price per ton received by farmers, United States, 2/ 3/						
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
1953	56.70	51.50	52.40	53.30	53.00	52.00	51.40	50.50	50.80	51.40	51.40	54.00	52.70
1954	61.30	61.60	60.20	59.40	59.60	56.80	55.20	53.40	53.40	53.10	52.00	54.00	60.30
1955	50.10	43.70	43.50	44.30	45.00	45.50	46.20	46.80	46.90	47.30	47.40	49.00	44.60
1956	51.00	47.70	54.10	59.20	59.90	60.40	58.60	60.60	---	---	---	55.00	53.40
1957	55.70	53.20	49.80	50.00	50.50	51.20	49.40	51.20	---	---	---	45.00	51.10
1958	47.60	45.50	43.20	43.50	43.00	43.30	43.80	45.40	---	---	---	42.00	43.80
1959	42.80	37.90	39.10	38.80	39.10	39.60	39.60	39.80	---	---	---	38.00	38.80
1960	38.90	39.20	42.60	44.40	45.20	44.60	44.70	44.80	---	---	---	49.00	42.60
1961	49.90	47.50	51.50	52.40	51.50	50.90	51.50	50.90	---	---	---	49.00	51.10
1962	47.40	47.30	47.80	48.10	47.60	48.20	48.50	49.00	---	---	---	49.00	47.90
1963	50.60	49.60	51.50	51.80	50.70	49.00	48.70	46.30	---	---	---	49.00	50.70
1964	44.90	44.70	47.30	47.70	48.60	49.20	48.20	47.70	---	---	---	46.00	47.10
1965	45.80	46.30	46.70	46.40	47.80	47.80	47.50	47.60	---	---	---	---	46.70
1966 1/	62.90	65.50	65.90	65.60	65.90	65.30	63.30	63.50	---	---	---	59.00	65.90

1/ Preliminary.

2/ Monthly prices by States weighted by sales to obtain a weighted average for the United States; season average prices by States weighted by sales during the crop marketing season to obtain the United States average.

3/ Season average price includes an allowance for unredeemed loans.

USDA announced on September 8, 1967, plans to buy lard and/or shortening for use in schools, family distribution programs, and other eligible outlets. During October-March 1966/67, USDA purchased 79 million pounds of lard-shortening with Section 32, P.L. 320 funds.

BUTTER

Production Up 12 Percent; Stocks Continue to Increase

Creamery butter production during October-August 1966/67 totaled an estimated 1,160 million pounds--up 12 percent from the relatively low 1,036 million in the same months a year earlier. Domestic disappearance is down about 14 percent from a year earlier and monthly stocks have increased steadily. Lower butter sales this year than last is attributed mainly to higher butter prices. CCC donations for domestic programs are expected to increase from a year earlier in the coming months and the increase will tend to offset some of the decline in commercial sales.

Butter stocks have risen each month--from 32 million pounds on January 1, 1967, to 235 million on September 1, 1967. Most of the rise is in Government holdings, which increased from 11 million pounds on January 1 to 189 million on September 1, 1966. Most of USDA's 1967 butter purchases have moved into storage. Carryover stocks of butter this October 1 may be about triple the relatively low 68 million pounds on October 1, 1966.

Butter prices at major markets began to strengthen in August, when butter production approached the seasonal low which is usually reached in September. Butter prices, which had been at support levels since December, rose to 68 3/4 cents per pound (Grade A, Chicago) by August 21, but then weakened, averaging 67.1 cents per pound for the month. Wholesale butter prices this fall are expected to average above support price levels.

SAFFLOWER OIL

Edible Uses Increase Sharply in 1966/67

Factory consumption of safflower oil during the 1966/67 marketing year that ended July 31 was reported at 99 million pounds, about 41 percent more than the year before and a new high. The increase

Table 11.--Safflower oil: Estimated consumption by end-uses, year beginning August, 1962-66 1/

Year beginning August	Edible uses: Salad and cooking oil	Edible uses: Margarine	Edible uses: Shortening	Edible uses: Total	Inedible uses	Total factory consumption
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
1962	17	18	5	40	7	47
1963	28	19	5	52	14	66
1964	13	14	6	33	19	52
1965	16	30	5	51	19	70
1966 2/	30	43	4	3/84	15	99

1/ Total factory consumption reported by Census. Distribution by end uses estimated by ERS. 2/ Preliminary. 3/ Includes 7 million pounds "other edible" uses.

Table 12.--Food fats and oils: Supply and disposition, 1957-66

Item	Year beginning October									
	1957	1958	1959	1960	1961	1962	1963	1964	1965 1/	1966 1/
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Stocks, October 1										
Butte_	145	146	93	136	238	2/419	2/450	2/188	161	68
Lard	69	46	93	92	100	73	81	68	62	64
Cottonseed oil	146	154	190	217	170	296	488	433	236	202
Soybean oil	286	281	298	308	677	618	920	578	297	462
Other 3/	49	56	60	78	94	128	206	118	110	179
Sub-total	694	683	734	830	1,279	1,534	2,145	1,385	866	976
Finished products 4/	140	145	172	190	288	480	355	240	206	235
Total food fats and oils	834	828	906	1,021	1,567	2,014	2,500	1,625	1,072	1,211
Imports 3/	70	74	66	81	91	55	73	50	63	80
Production										
Butter	1,502	1,413	1,435	1,489	1,596	1,491	1,454	1,412	1,120	1,250
Lard	2,423	2,679	2,726	2,481	2,468	2,495	2,475	2,205	1,900	2,050
Cottonseed oil 5/	1,420	1,589	1,832	1,786	1,952	1,930	1,939	2,001	1,833	1,250
Soybean oil	3,800	4,251	4,338	4,420	4,790	5,091	4,822	5,146	5,800	5,950
Other 3/ 5/	678	767	771	863	923	1,057	1,208	1,318	1,487	1,600
Sub-total	9,823	10,700	11,102	11,039	11,729	12,064	11,898	12,082	12,140	12,100
Soybean exports (oil equiv.)	939	1,209	1,552	1,431	1,685	1,981	2,103	2,265	2,764	2,875
Total food fats and oils	10,762	11,909	12,654	12,470	13,414	14,047	14,001	14,347	14,904	14,975
Total supply	11,666	12,811	13,626	13,572	15,072	16,116	16,574	16,022	16,039	16,265
Exports 6/										
Butter	36	19	22	9	7/19	7/131	7/319	150	24	10
Lard	461	608	716	513	508	571	706	431	218	250
Cottonseed oil 5/	250	406	506	7/371	7/474	7/392	7/586	643	272	100
Soybean oil	804	930	953	7/721	7/1,308	7/1,165	7/1,106	1,357	947	1,150
Other 3/ 5/	19	34	43	7/40	11	15	147	216	240	225
Adjustment 8/	85	117	88	83	77	93	111	77	64	75
Sub-total	1,655	2,114	2,328	1,737	2,397	2,367	2,975	2,874	1,765	1,810
Soybeans (oil equivalent)	939	1,209	1,552	1,431	1,685	1,983	2,103	2,265	2,764	2,875
Total exports	2,593	3,323	3,880	3,168	4,082	4,350	5,078	5,139	4,529	4,685
Domestic use										
Butter	1,467	1,449	1,373	1,380	1,400	1,332	1,399	1,291	1,193	1,075
Lard 9/	1,994	2,024	2,003	1,969	1,982	1,904	1,786	1,780	1,676	1,775
Cottonseed oil	1,195	1,147	1,299	1,461	1,352	1,347	1,407	1,555	1,595	1,175
Soybean oil	3,051	3,304	3,376	3,329	3,540	3,624	4,058	4,069	4,688	4,750
Other 3/	719	796	773	912	968	1,040	1,230	1,162	1,189	1,350
Adjustment 8/	-85	-117	-88	-83	-77	-93	-111	-77	-64	-75
Total 9/	8,341	8,603	8,739	8,968	9,165	9,154	9,769	9,780	10,277	10,050
Total (calculated net) 10/	8,336	8,576	8,721	8,869	8,973	9,279	9,88	9,814	10,248	
Total use for food 11/	8,145	8,389	8,438	8,562	8,600	8,846	9,605	9,279	9,947	
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
Per capita, civilian and military 12/										
Butter (fat content)	6.8	6.6	6.1	6.1	6.1	5.7	5.9	5.3	4.9	
Other	38.5	39.4	39.3	39.2	38.7	39.8	42.9	41.2	44.6	
Total (fat content)	45.3	46.0	45.4	45.3	44.8	45.5	48.8	46.5	49.5	

1/ Preliminary. 2/ Includes estimates of butter oil, ghee, and canned butter. 3/ Includes beef fats, cottonseed, peanut, corn, olive, safflower and sesame oils. 4/ Shortening, margarine, salad and cooking oils. 5/ Includes oil equivalent of oilseeds exported. 6/ Includes shipments. Butter, cottonseed oil and adjustments includes quantities from CCC stocks that are not reported in Census data. 7/ Includes estimates of foreign donations of fats and oils, not reported by Census. 8/ Includes exports of processed food oils not classified by kind, shortening and other secondary fats. 9/ Adjusted for estimated changes in stocks of farm lard. 10/ Adjusted to reflect changes in stocks of finished products. 11/ Excludes food fats used for non-food purposes, but includes non-food oils (mostly coconut and palm kernel) used in food. 12/ Adjusted for trade and changes in stocks of shortening, margarine and salad and cooking oils.

was in edible uses, which accounted for 85 percent of total disappearance.

Margarine and salad and cooking oils are the largest outlet for safflower oil, accounting for nearly 75 percent of total usage. Safflower is a highly unsaturated edible oil, and new products (such as the "soft" tub margarines) have increased domestic demand. Inedible uses of safflower oil are mainly as a drying oil in paints and varnishes.

Stocks of safflower oil (crude and refined) rose from 29 million pounds on August 1, 1966, to a seasonal peak of 59 million on March 1, then declined to 36 million on August 1, 1967. Stocks at this level are equal to about 4 months' current domestic requirements. Because there are only a few producers of safflower oil, Census cannot publish statistics most months without disclosing the operations of individual companies.

Safflower oil prices (nonbreak, tanks, Eastcoast) declined from 16.8 cents per pound in August 1966 to 13.9 cents in July 1967. They averaged 16.0 cents for the entire marketing year, compared with 15.4 cents in 1965/66. The drop in safflower oil prices is attributed to the general decline in prices of competitive vegetable oils (especially during the past summer) and the relatively high safflower oil stocks/usage ratio. The August 1967 average price was 13.6 cents per pound.

PEANUTS

Prices For 1967 Crop To Average Near Support

As of September 1, the 1967 peanut crop was estimated at a record 2,557 million pounds (net weight, farmers' stock basis)--6 percent above the 2,411 million pounds of 1966. The increase is due entirely to greater yields, as the 1.4 million acres to be harvested for nuts is nearly 2 percent below last year's. The estimated U.S. average yield per acre on September 1 was 1,827 pounds, compared with 1,696 pounds the year before. The entire increase is in the Southeast area, where yields are up 20 percent with all the major-producing States in this region showing substantial gains. Yields are down 6 percent in the Southwest area and down fractionally in the Virginia-Carolina area. Acreage allotments for 1967-crop peanuts again are at the legal minimum of 1.6 million acres--the same as in past years. The Southeast area accounts for around half of the U.S. crop and the Virginia-Carolina area--Southwest area about one-fourth each.

For the 1967/68 marketing year, total supplies (production plus beginning stocks on August 1) of farmers' stock peanuts are indicated at 2,930 million pounds--about 4 percent above last season (table 13). Since indicated peanut supplies are well in excess of prospective requirements for food and farm use, around one-third of the 1967 crop would be available for crushing, exports, and carryover stocks. The CCC is expected to acquire most of the excess peanuts under the price support program.

The 1967 crop of peanuts is being supported at a national average loan rate of $227 per net weight ton (11.35 cents per pound)--the same as in 1966. The 1967 rate is 75.2 percent of the August 1, 1967, parity price. Support by types is as follows: Virginia, $239.86; Runner, $214.24; Southeast Spanish, $231.98; Southwest Spanish, $222.70; and Valencia (suitable for cleaning and roasting), $239.86. Price support will be available through loans and purchases from time of harvest through January 31, 1968. The marketing agreement program--which was started with 1965-crop peanuts to regulate the quality of peanuts marketed by handlers for edible use--also is being continued in 1967/68.

During the current marketing year prices to peanut growers likely will average near the support price of $227 per ton. In 1966/67, prices averaged $224 per ton. With an excess in supplies of peanuts in recent years, farm prices have tended to average near the support level.

Table 13.--Peanuts (farmers' stock): Supply and disposition, 1942-67

Year beginning Aug. 1	Supply				Disposition					
								Domestic food use		
	Production	Imports	Stocks Aug. 1	Total supply	Exports and shipments	Crushed for oil	Seed, feed & Residual	Military	Civilian	Civilian per capita
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1942	2,193	4	194	2,391	5	420	334	146	1,172	9.0
1943	2,176	2	314	2,492	34	488	305	223	1,089	8.5
1944	2,081	54	353	2,488	28	436	329	288	1,122	8.7
1945	2,042	32	285	2,359	64	397	239	14	1,268	9.4
1946	2,038	1/	377	2,465	249	534	357	---	1,081	7.7
1947	2,182	1/	244	2,426	482	477	297	3	932	6.5
1948	2,336	1/	235	2,571	725	473	213	6	955	6.5
1949	1,865	1/	199	2,064	172	610	232	7	856	5.7
1950	2,035	0	187	2,222	69	629	211	14	967	6.4
1951	1,659	0	332	1,991	8	432	120	10	1,005	6.6
1952	1,356	0	416	1,772	3	195	144	10	998	6.4
1953	1,574	1/	422	1,996	239	303	151	10	1,007	6.4
1954	1,008	180	286	1,474	9	107	130	7	1,012	6.3
1955	1,548	5	209	1,762	6	257	157	1	954	5.8
1956	1,607	5	387	1,999	102	260	152	3	1,026	6.1
1957	1,436	2	456	1,894	48	239	162	3	1,081	6.4
1958	1,814	2	361	2,177	62	335	170	8	1,088	6.3
1959	2/1,523	1	514	2,038	72	292	96	3	1,151	6.5
1960	1,718	1/	424	2,142	81	362	87	8	1,236	6.9
1961	1,657	3	368	2,028	34	256	84	7	1,258	6.9
1962	1,719	2	389	2,110	43	302	75	8	1,285	6.9
1963	1,942	2	397	2,341	97	380	107	5	1,342	7.1
1964	2,099	2	410	2,511	179	473	75	8	1,403	7.4
1965	2,384	1	373	2,758	247	517	77	14	1,491	7.7
1966 3/	2,411	2	412	2,825	230	548	186	2	1,462	7.5
1967 4/	2,557	1	5/372	2,930					1,525	7.7

1/ Less than 500,000 pounds.
2/ Beginning with 1959 crop, production reported on a net weight basis. Prior years were gross weight.
3/ Preliminary.
4/ Based on September 1 indications. Disposition forecast.
5/ Net weight basis.

FLAXSEED

1967 Crop Smallest In Nearly 30 Years

Based on September 1 conditions, the 1967 flaxseed crop was estimated at 19.1 million bushels--one-fifth below last year and the smallest since 1938. Harvested acreage, at 2.0 million acres, is 23 percent below a year ago. Yields, at 9.4 bushels per acre, are fractionally above the 9.1 bushels of last year. However, yields are down 2 bushels in the major-producing State of North Dakota, which normally produces over 50 percent of the U.S. flaxseed crop. Yields are well above average in Minnesota and South Dakota. These 3 States are expected to produce over 98 percent of the nation's crop this year.

Prices received by farmers for 1967-crop flaxseed are expected to average above the $2.89 of 1966/67 and the support price of $2.90 per bushel (farm basis). Farm prices in July-August, the first 2 months of the current marketing year, averaged $3.00 per bushel, compared with $2.92 a year ago.

The price support program is being conducted through farm and warehouse-stored loans and purchases in most areas, the same as in recent years. Loans are available up to 30 days prior to the loan maturity dates. The terminal (Minneapolis) support rate for 1967-crop flaxseed is $3.15 per bushel, the same as for the 1966 crop. Loans will mature on May 31, 1968, in Minnesota, Montana, North Dakota, South Dakota and Wisconsin, and on April 30, 1968, in all other States except Texas, which has a special purchase program.

Supplies Down Over A Fourth From Last Year

Total flaxseed supplies in the 1967/68 marketing year (starting stocks on July 1 plus the 1967 crop) are indicated at 28 million bushels--down 11 million or 28 percent from last season (table 14). Smaller supplies stem from the sharply reduced 1967 crop and lower carryover stocks. Starting stocks on July 1, 1967, totaled 9.2 million bushels (about 6 million held by CCC), compared with 15.3 million (10 million in CCC hands) last July 1. CCC also holds the 80 million pounds of linseed oil (equivalent to 4 million bushels of flaxseed) acquired under the toll-crush program for the 1963 flaxseed crop.

Flaxseed crushings for the current year are estimated at around 18 million bushels--down about 2 million from the previous year. A crush this size would produce around 360 million pounds of linseed oil and about 325,000 tons of linseed cake and meal. Flaxseed exports are placed near 3 million bushels, compared with 7.5 million in 1966/67. Another 2 or 3 million bushels will be required for seeding next year's crop, leaving possibly 5 million bushels for carryover stocks on June 30, 1968.

Flaxseed prospects in Canada and Argentina, the other major western hemisphere producers, also are expected to be below last season's. The first official estimate of Canadian production placed the crop at 10.3 million bushels--down over 50 percent from the 22.0 million bushels in 1966. The sharp drop is due to smaller acreage and lower yields as a result of drought. Acreage at 1.1 million is down 42 percent from the 1.9 million acres of 1966. Yields, at 9.3 bushels per acre, compared with 11.5 bushels in 1966. The first official estimate placed seedings in Argentina at 2.0 million acres--13 percent below the 2.3 million acres seeded last season.

Linseed Oil Use Declines

Linseed oil prices (raw, tank cars, Minneapolis) during July and August averaged 12.8 cents per pound--the same as a year ago. Over the past 2 years, prices have been extremely stable, hovering around 13 cents most of the time.

During 1966/67, domestic disappearance of linseed oil totaled 326 million pounds--down from the 336 million of 1965/66 and the fourth consecutive decline (table 17). Domestic use now is less than one-half of the record post-war total of 728 million pounds used in 1950/51. For the entire

Table 14.--Flaxseed: Supply and disposition, crop years 1959-67

Item	Year beginning July								
	1959	1960	1961	1962	1963	1964	1965	1966	1967 1/
	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels
Total stocks, July 1 2/	19.6	7.4	10.0	8.7	14.7	20.3	20.6	27.1	18.9
Supply of flaxseed									
Stocks, July 1	14.6	3.0	5.3	3.6	8.4	13.1	10.9	15.3	9.2
Production	21.2	30.4	22.2	32.2	31.2	24.4	35.4	23.9	19.1
Total supply	35.9	33.4	27.5	35.8	39.5	37.5	46.3	39.2	28.3
Disposition of flaxseed									
Crushed	23.2	20.0	19.0	21.0	19.4	20.8	22.7	19.7	18
Exports	8.3	7.0	1.5	4.3	3.6	6.5	5.3	7.5	3
Seed	2.4	2.1	2.2	2.4	2.1	2.0	1.9	1.6	2
Residual	-1.1	-.9	1.2	-.3	1.3	-2.7	1.1	1.3	
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Price per bushel									
Support:									
Minneapolis basis	2.66	2.65	3.07	3.13	3.13	3.13	3.15	3.15	3.15
U.S. Farm basis	2.38	2.38	2.80	2.90	2.90	2.90	2.90	2.90	2.90
Received by farmers	3.00	2.65	3.26	2.83	2.76	2.82	2.80	2.89	

1/ Indicated September 1, 1967. Disposition forecast.
2/ Includes flaxseed equivalent of linseed oil.

Table 15.--Flaxseed: Price support operations, crop years, 1947-66

Year beginning July	Production	Price support operations							
		Owned by CCC on July 1			Under price support				
		Flaxseed	Linseed oil 1/	Total (seed equivalent)	Loans	Purchase agreement	Total	Percent of crop	Flaxseed acquired by CCC
	Million bushels	Million bushels	Million pounds	Million bushels	Million bushels	Million bushels	Million bushels	Percent	Million bushels
1947	40.6	0	0	0	.5	2/	.5	1.3	.1
1948	54.8	.1	.4	.1	1.4	3/25.2	26.5	48.4	24.6
1949	43.0	17.5	295.8	32.3	9.4	3/2.5	11.9	27.8	9.7
1950	40.2	13.4	471.7	37.0	.9	.1	1.0	2.4	2/
1951	34.7	3.2	4/521.4	29.2	1.8	.1	1.9	5.4	2/
1952	30.2	.2	4/498.6	25.1	3.8	3/1.7	5.5	18.1	4.9
1953	37.7	5.2	4/489.5	29.6	15.5	3/3.6	19.0	50.5	17.6
1954	41.3	8.8	42.0	10.9	7.3	3.1	10.4	25.1	8.8
1955	40.4	6.8	54.7	9.6	7.1	1.5	8.6	20.8	2/
1956	47.0	2/	5/	2/	14.6	2.9	17.5	36.4	16.7
1957	25.1	13.5	0	13.5	2.5	3/2.0	4.4	17.1	3.5
1958	37.4	3.2	0	3.2	12.0	3.2	15.1	39.3	13.1
1959	21.2	6/6.9	11.0	7.4	.3	.1	.4	2.0	2/
1960	30.4	.1	5/	.1	2.7	.4	3.1	10.1	2/
1961	22.2	0	0	0	.8	.1	.9	4.1	2/
1962	32.2	0	0	0	5.7	1.3	7.0	21.7	5.9
1963	31.2	5.3	0	5.3	11.8	1.1	12.9	41.3	11.2
1964	24.4	10.6	53.0	13.3	6.3	0	6.3	25.8	4.0
1965	35.4	6.3	80.0	10.3	7.4	3.7	11.1	31.4	9.6
1966 7/	23.9	12.4	80.0	16.4	1.9	0	1.9	7.9	.7
1967	8/19.1	4.6	80.0	8.6					

1/ Conversion factors: 20 pounds of linseed oil per 56 pound bushel of flaxseed. 2/ Less than 50,000 bushels. 3/ Includes direct purchases: 1948, 22,680,000 bu.; 1949, 197,000 bu.; 1952, 53,000 bu.; 1953, 749,916 bu.; 1957 83,114 bu. 4/ Includes 300 million pounds linseed oil (15 million bushels of flaxseed equivalent) transferred to account of Secretary pursuant to his authority under the Defense Production Act of 1950. 5/ Less than 50,000 pounds. 6/ Excludes 1.1 million bushels resealed in farm storage. 7/ Preliminary. 8/ Indicated September 1.

1967/68 marketing year, domestic use is expected to total around 325 million pounds.

Linseed oil exports in 1966/67 totaled 121 million pounds, compared with 84 million the previous year. Exports in 1967/68 are expected to be well below this quantity. The increase last season was due in large part to the Flaxseed and Linseed Oil Export Program, which provided subsidy payments. The program was suspended on June 6, 1967, until further notice.

During 1966/67, linseed meal prices (bulk, 34-percent protein, Minneapolis) averaged $76 per ton, the highest since 1947/48. The high prices resulted from the smaller output of linseed and cottonseed meal, both used primarily for cattle feeding, and the strong price structure for all of the major oilseed meals. Linseed meal prices in July-August 1967, averaged $75 per ton--down about $8 from a year ago.

Domestic disappearance in 1966/67 totaled 244,500 tons--down from the 289,400 tons in 1965/66. Exports totaled 110,600 tons, compared with 115,400 tons last season. Because of continued brisk demand for high-protein meals, linseed meal prices in 1967/68 are expected to remain strong.

INEDIBLE TALLOW AND GREASE

Prices Down Sharply; Disappearance Well Ahead of Last Year

Inedible tallow and grease production for the 1966/67 marketing year which ends September 30 is placed at 4.7 billion pounds--about 0.3 billion pounds above the previous year. Output during October-July 1966/67, totaled 3,945 million pounds, compared with 3,625 million for the comparable period a year ago. The increase stems from increased hog and cattle slaughter and heavier cattle weights. Domestic use is expected to total around 2.6 billion pounds, compared with 2.4 billion last season. On August 1, 1967, inedible tallow stocks totaled 431 million pounds, compared with 382 million last August 1. However, stocks have been worked down from their peak in February 1967, when they totaled 508 million pounds.

Domestic disappearance of inedible tallow and grease during October-July 1966/67 totaled 2,043 million pounds, compared with 1,941 million for the comparable period a year ago. Increased use in animal feeds and soap more than offset declines in fatty acids and lubricants.

During October-July 1966/67, inedible tallow and grease exports totaled 1,891 million pounds, compared with 1,655 million for the like period a year ago. As in past seasons, Japan is the major customer, taking about one-fourth of total exports. The Netherlands, Egypt, Italy, Spain, and West Germany also are important buyers. During October-July 1966/67 exports under P.L. 480 are preliminarily placed at 201 million pounds. Of this quantity, 171 million were shipped under Title I and 30 million under Title IV programs. Another 154 million pounds still remained to be exported. Last season, exports under government programs were negligible.

Inedible tallow prices (prime, c.a.f. delivered, Chicago) dropped sharply from 6.5 cents per pound in October 1966 to 4.9 cents in September 1967--averaging 5.5 cents for the entire marketing year. In 1965/66, prices averaged 7.3 cents per pound. The decline is mainly due to the relatively heavy stocks on hand (which built up following the sluggish demand of the past few years as a result of the higher prices) and the increased production this marketing year.

TUNG OIL

Stocks Buildup Continues; Domestic Disappearance Steady

Total U.S. supplies of tung oil for the current marketing year ending

Table 16.--Flaxseed: Crushings and yields of oil and meal per bushel crushed, and price, by months, crop years 1955-66

Year beginning July	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
							Crushings						
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
1955	2,023	2,635	3,064	4,275	3,132	3,263	3,268	2,978	3,202	2,171	3,017	1,920	34,948
1956	946	933	2,308	4,020	3,295	2,971	2,328	2,239	2,586	1,500	1,561	1,508	26,195
1957	3,055	3,373	2,981	2,730	2,373	2,069	1,854	1,942	2,312	1,684	1,585	1,364	27,322
1958	1,000	1,872	2,559	2,571	2,245	2,164	2,279	1,664	1,886	1,129	1,671	1,354	22,394
1959	1,957	2,918	2,964	3,025	1,732	1,782	1,850	1,654	1,629	1,446	1,086	1,175	23,218
1960	782	1,139	2,161	2,257	1,914	1,296	1,661	1,532	1,568	1,814	2,086	1,743	19,953
1961	1,357	1,889	1,979	1,671	2,000	1,611	1,629	1,650	1,489	1,586	1,139	1,046	19,046
1962	696	1,368	2,250	2,450	1,943	1,636	1,889	1,539	1,789	1,725	1,804	1,921	21,010
1963	386	1,229	1,861	2,057	1,761	1,571	1,707	1,668	1,693	1,571	1,911	2,032	19,447
1964	1,639	1,871	2,104	2,329	1,746	1,761	1,721	1,654	1,882	1,407	1,093	1,568	20,775
1965	804	1,857	2,375	2,254	1,629	1,979	1,864	1,846	2,082	1,764	2,036	2,225	22,714
1966 1/	796	1,854	2,157	2,207	1,807	1,461	1,636	1,436	1,521	1,471	1,561	1,686	19,657
1967 1/	325	1,550											
							Yield of oil per bushel crushed						
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
1955	20.4	19.9	20.0	19.8	20.0	19.8	19.7	19.9	19.8	19.9	19.8	20.0	19.9
1956	20.3	19.9	20.3	20.3	20.2	20.2	20.3	20.4	20.5	20.7	20.5	20.2	20.3
1957	20.1	20.3	19.7	19.4	19.3	19.2	19.3	19.5	19.1	19.5	19.3	19.3	19.6
1958	19.1	19.8	20.1	20.3	20.3	20.2	20.0	20.1	19.8	19.8	20.0	19.8	20.0
1959	20.1	20.2	19.9	19.9	20.1	20.0	20.1	19.9	20.0	20.4	20.0	20.3	20.0
1960	20.2	19.1	19.9	19.9	20.2	20.1	20.0	20.1	20.0	20.1	20.0	20.0	20.0
1961	24.8	20.1	20.6	20.3	19.8	19.9	20.4	20.2	20.6	20.0	20.2	20.0	20.5
1962	20.5	19.8	19.9	20.0	20.5	20.7	20.7	20.1	20.5	20.4	21.1	20.7	20.4
1963	21.0	21.1	20.1	20.0	19.8	20.4	20.7	20.2	19.8	20.0	20.6	20.1	20.2
1964	20.6	20.4	20.0	19.6	20.2	19.7	20.2	19.3	21.0	20.3	20.4	20.0	20.1
1965	19.5	20.0	20.5	20.4	20.6	20.7	20.1	20.6	20.7	20.6	20.1	20.3	20.4
1966 1/	20.0	20.8	20.4	20.6	20.8	20.6	20.4	20.7	20.6	20.5	20.8	21.0	20.6
1967 1/	22.2	21.4											
							Yield of meal per bushel crushed						
1955	36.4	35.5	36.7	37.1	37.9	36.8	36.4	36.9	36.4	37.0	36.9	37.7	36.8
1956	38.7	38.0	36.5	37.0	36.4	37.6	36.7	37.1	36.6	37.1	36.9	37.3	36.9
1957	35.5	36.1	37.0	37.3	37.8	37.0	37.0	37.5	37.0	38.0	37.6	37.8	37.0
1958	37.2	37.8	36.3	36.5	36.2	36.4	36.6	36.7	36.2	37.6	35.9	36.5	36.6
1959	36.2	36.4	36.4	36.5	36.3	36.9	37.4	36.9	37.3	36.8	36.8	37.4	36.7
1960	38.1	38.2	37.4	38.2	39.2	38.7	37.9	37.9	37.9	37.2	36.8	37.3	37.9
1961	37.1	37.1	38.6	38.5	37.6	37.7	37.7	37.5	37.2	36.9	37.4	38.2	37.6
1962	39.9	36.4	37.9	37.4	36.5	36.9	36.3	36.5	36.3	36.1	35.7	37.8	36.9
1963	37.8	37.4	37.1	37.1	37.0	36.7	36.4	36.7	37.0	36.9	36.8	37.6	37.1
1964	38.3	36.8	37.5	36.6	37.0	36.1	36.6	36.3	36.3	36.2	36.4	36.0	36.7
1965	35.6	35.8	35.6	35.5	35.1	35.0	34.9	34.6	34.2	34.8	34.9	35.7	35.1
1966 1/	35.7	35.3	37.6	38.0	37.2	36.8	36.4	37.0	37.7	36.7	36.1	36.1	36.9
1967 1/	39.4	39.4											
							Average price per bushel received by farmers, United States 2/						
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
1955	2.95	2.81	2.74	2.76	2.80	2.84	2.96	3.07	3.26	3.44	3.54	3.12	2.90
1956	2.96	2.97	2.89	2.92	3.05	3.05	3.04	2.95	2.89	2.80	2.79	2.72	2.99
1957	2.69	2.84	3.04	2.99	2.94	3.01	2.95	2.84	2.73	2.61	2.58	2.64	2.94
1958	2.84	2.73	2.58	2.60	2.57	2.60	2.59	2.58	2.56	2.60	2.62	2.70	2.69
1959	2.63	2.90	3.07	3.21	3.44	3.20	3.12	3.00	2.81	2.93	3.04	2.94	3.00
1960	2.64	2.80	2.65	2.50	2.40	2.47	2.47	2.61	2.68	2.75	2.84	2.88	2.65
1961	3.41	3.40	3.35	3.23	3.12	3.16	3.14	3.18	3.21	3.27	3.18	3.03	3.26
1962	3.10	2.94	2.84	2.79	2.79	2.72	2.75	2.79	2.81	2.79	2.77	2.85	2.83
1963	2.84	2.71	2.58	2.71	2.74	2.77	2.83	2.79	2.85	2.81	2.77	2.81	2.76
1964	2.75	2.70	2.71	2.83	2.93	2.90	2.91	2.92	2.89	2.87	2.86	2.87	2.82
1965	2.89	2.83	2.73	2.67	2.72	2.71	2.73	2.81	2.85	2.84	2.76	2.78	2.80
1966 1/	2.91	2.93	2.92	2.90	2.90	2.88	2.87	2.85	2.85	2.88	2.83	2.88	2.89
1967 1/	2.98	3.02											

1/ Preliminary.

2/ Season average price includes an allowance for unredeemed loans.

Table 17.--Linseed oil: Supply and disposition and oil equivalent of exports of flaxseed 1947-67

Year beginning July	Supply				Disposition		Flaxseed (oil equivalent of exports)
	Production	Imports	Stocks, July 1	Total	Exports	Domestic disappearance	
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1947	595	14	144	753	42	573	1/
1948	737	2	138	877	14	482	92
1949	728	1/	381	1,109	5	517	39
1950	844	1/	588	1,432	26	728	57
1951	609	1/	679	1,288	28	585	83
1952	507	1/	675	1,182	3	559	4
1953	551	---	619	1,162	303	522	47
1954	632	---	345	977	318	521	162
1955	695	---	139	834	140	552	207
1956	532	---	142	674	78	497	51
1957	535	---	99	634	87	435	181
1958	448	---	112	560	8	455	125
1959	465	---	97	563	55	418	166
1960	399	---	90	489	24	370	139
1961	391	---	94	485	2	378	30
1962	428	---	105	533	9	394	87
1963	394	---	131	524	14	2/388	72
1964	418	---	144	557	3/20	344	130
1965	463	---	198	661	84	336	105
1966 4/	405	1/	241	646	121	326	149
1967 5/	360	---	199	560		325	

1/ Less than 500,000 pounds. 2/ Factory consumption figures used for years in which reported factory consumption exceeds domestic disappearance. 3/ Beginning January 1965 includes shipments to U. S. Territories. 4/ Preliminary. 5/ Forecast except stocks July 1, 1967. Totals computed from unrounded numbers.

Table 18.--Linseed oil: Utilization, 1947-66

Year beginning July	Drying oil products					Lubricants and similar oils	Fatty acids	Foots and loss	Other	Total domestic disappearance
	Paint and varnish	Linoleum and oilcloth	Resins	Other	Total					
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1947	431	114	---	23	568	---	---	---	5	573
1948	337	95	2	41	475	---	---	3	5	482
1949	384	75	17	29	505	---	---	8	4	517
1950	526	107	27	42	702	---	---	7	18	728
1951	415	86	23	43	566	---	---	10	9	585
1952	403	93	14	32	541	---	---	14	5	559
1953	386	76	13	29	504	---	---	11	7	522
1954	368	69	19	45	501	---	---	11	10	521
1955	393	66	21	49	530	---	---	13	9	552
1956	376	47	18	35	476	---	---	10	11	497
1957	342	29	14	32	418	---	---	11	6	435
1958	371	31	16	22	441	3	3	5	3	455
1959	343	30	22	12	408	4	5	---	1	418
1960	309	22	19	11	361	4	5	---	1/	370
1961	317	22	18	10	367	4	7	---	---	378
1962	343	14	20	11	388	3	3	---	---	394
1963	338	14	19	10	381	2	4	---	---	3/388
1964	294	14	22	8	338	3	3	---	---	344
1965	283	14	19	8	324	5	7	---	1/	336
1966 2/	275	14	21	11	321	6	1/	---	---	326

1/ Less than 500,000 pounds. 2/ Preliminary. 3/ Factory consumption figures used for years in which reported factory consumption exceeds domestic disappearance.

Totals computed from unrounded numbers.

October 31, 1967, are estimated at 103 million pounds. This estimate, based on starting stocks, domestic production, and imports, compares with 90 million pounds last season. Domestic disappearance is placed slightly below last year's 36 million pounds. During November-July 1966/67, factory consumption totaled 22 million pounds--nearly 3 million below the year earlier period. Exports are not expected to exceed 1 million pounds. Tung oil stocks on August 1, 1967, totaled 74 million pounds, compared with 56 million a year ago. As of September 1, about 23 million pounds of 1966-crop tung oil were under the CCC price support program. The CCC also owned or had under extended loans another 40 million, for a total of 63 million pounds.

From October 1966 through late September 1967, CCC sold about 7 million pounds of 1963-crop tung oil (including foots) on competitive bids for unrestricted use. The sale price for this oil has declined from 18.0 cents to 11.5 cents per pound for the most recent sale. These sales are setting the market price for tung oil in the United States and reflect the world price situation. The oil is marketed by USDA in cooperation with the National Tung Oil Marketing Cooperative, Inc., Poplarville, Mississippi. Offers of 1,000,000 pounds are made semi-monthly.

Prices for 1967-crop tung nuts will be supported at not less than $63.34 per ton (67.8 percent of the June 1967 parity price of $93.40 per ton), with an equivalent support of 24 cents per pound for tung oil. The 1967 support is unchanged from last year. The program will be carried out through nonrecourse warehouse storage loans on tung oil available to eligible producers from November 1, 1967, through September 30, 1968. Tung oil not redeemed by October 31, 1968, will be pooled and handled by the National Tung Oil Marketing Cooperative Inc.

The Fats and Oils Situation is published January, March, June, September and November.

The last issue for 1967 is scheduled for release on November 9 (Outlook Issue).

SUNFLOWERS GAIN AS AN OILSEED CROP IN THE UNITED STATES

by
George W. Kromer

Sunflowers have been grown in the U.S. primarily for the whole seed trade. As a rule, very few were processed as an oilseed. Seed varieties were low in oil content (about 28%); for this and other reasons, sunflowers were unable to compete economically with soybeans and flaxseed, the well-established and extensively cultivated oil-yielding crops. Recently, with the availability of high-oil content Russian varieties of seed (40-44% oil), there has been renewed interest in producing sunflowers as an oilseed crop in the Red River Valley of Minnesota and North Dakota.

The tall-growing large-seeded sunflower varieties are usually used in the whole seed trade. The dwarf and semi-dwarf type, with small heads, small seeds, and higher oil content, are preferred for processing into oil. As an oilseed crop, the dwarf varieties are preferable since their shorter and more uniform height makes harvesting with a modified grain combine more practical. Research to increase oil content continues in the United States through breeding programs for high-oil sunflower hybrids.

Sunflowers Have Many Uses

The major uses of sunflowers are: (1) birdfeed; (2) human food in the confectionery and health food trade; and (3) edible vegetable oil. Figure 1 shows the various uses of sunflowers, including the hulls and crop residue (stalks and heads). Some of the waste material uses shown are not economically feasible.

Statistics are not available showing the volume of sunflower seed going into each of these 3 outlets. Generally the large seed for the edible nut trade (roasted whole seed) brings the highest price. Medium large seed is usually dehulled and used for the nutmeat trade, whereas the smaller seed is used for birdfeed as an oilseed. There are no official U.S. grading standards for sunflower seed.

Birdfeed: Wild bird feeding is a major use of whole sunflower seeds. Caged birds, hamsters, squirrels, and other pets also consume significant quantities of seed.

Seed for Human Food: Sunflower seed may be salted in the shell, dehulled and eaten raw without processing, or dehulled and roasted in vegetable oil and salted. Dehulled sunflower seed is used for nutmeats and in candy, salads, and bakery goods.

Vegetable Oil: Whole air-dried sunflower oilseed contains about 40% oil, 35% meal, and 20 to 25% hulls. After the seed is decorticated, the oil is extracted by pressing the meats (kernels). This recovers about two-thirds of the oil. Most of the remaining oil is recovered by solvent extraction.

Sunflower oil is pale yellow. It is used as a cooking and salad oil and in the manufacture of margarine and shortening. Good grades of oil can be refined with a low processing loss. Other edible uses include pharmecutical products, popping corn, canning, etc. It is high in polyunsaturates and has excellent keeping quality.

Industrial Uses: Sunflower oil may be used in paints and varnish, plastics, caulking compounds, putty, cosmetics, soap, etc.

Meal and Flour: The meal remaining after oil extraction contains 40-44% protein. It can be fed to all classes of livestock and poultry. Sunflower meal

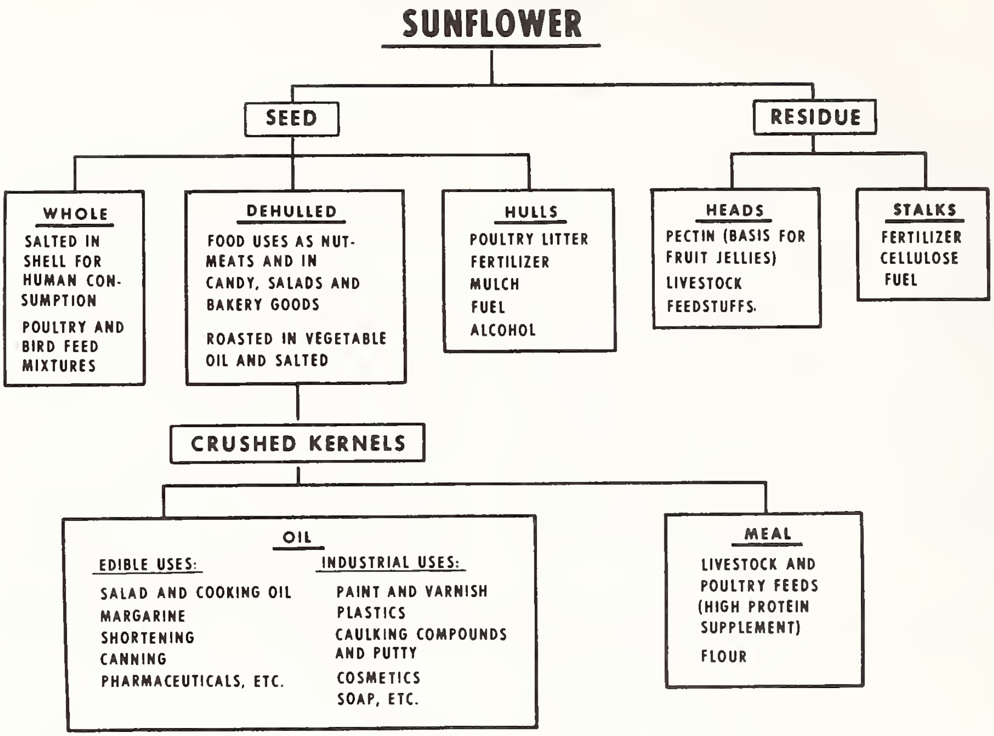

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Figure 1

competes directly with cottonseed, linseed, peanut, and soybean meals and is interchangeable with them in livestock feeds. Sunflower meal also has a potential as a supplement to wheat flour.

Hulls: The disposal of sunflower hulls creates a problem since they are bulky and low in value. It is uneconomical to transport them far. Hulls are used mainly as poultry litter, fertilizer, mulch, and fuel. The Russians have developed a method for fermenting them into alcohol; however, economics may not be favorable.

Stalks and Heads: These crop residues have low economic value. The stalks may be used as fertilizer, fuel, or cellulose. Yields per acre of sunflower stalks are too low for them to be considered an economic source of pulp.

The receptacle of the sunflower head is high in pectin (basis for fruit jellies) which could be extracted. (Citrus fruit culls and processing wastes are now a major source for pectin.) In Russia, sunflower heads are used as livestock feedstuffs.

1967 Acreage Triples in Red River Valley; One Half Planted To Oilseed Varieties

The USDA's Crop Reporting Board does not survey sunflower growers, so data on total U.S. acreage and production are not available. However, the Minnesota and North Dakota Crop and Livestock Reporting Services publish sunflower statistics. These 2 States account for most of the U.S. acreage and commercial production.

The 1967 acreage planted to sunflowers in Minnesota and North Dakota is estimated at 236,000 acres--about 3 times the 76,000 acres planted a year ago. North Dakota's 1967 plantings are placed at 135,000 acres and Minnesota's at 101,000 acres (table 19). The increase in acreage

Table 19.--Sunflower Seed: Acreage, yield, production, price and value, Minnesota and North Dakota, 1962-67

MINNESOTA

Year	Acreage Planted			Acreage harvested	Yield per harvested acre	Production	Price per cwt.	Value of production
	Total	Oilseed varieties	Bird feed and confectionery varieties					
	Acres	Acres	Acres	Acres	Pounds	Thousand pounds	Dollars	Thousand dollars
1963	29,000	---	---	28,000	1,100	30,800	4.15	1,278
1964	23,000	---	---	22,000	680	14,960	4.10	613
1965	24,000	---	---	21,000	800	16,800	4.70	790
1966	27,000	2/	2/	25,000	920	23,000	1/5.10	1/1,173
1967 1/	101,000	46,000	55,000	---	---	---	---	---
				NORTH DAKOTA				
1962	13,000	---	---	12,500	980	12,250	5.50	674
1963	31,000	---	---	30,000	970	29,100	4.35	1,266
1964	18,500	---	---	18,000	600	10,800	4.15	448
1965	25,500	---	---	25,000	850	21,250	5.00	1,062
1966	49,000	2/	2/	48,000	880	42,240	5.70	2,408
1967 1/	135,000	70,000	65,000	128,000	---	---	---	---

1/ Preliminary. 2/ No breakdown of varieties available prior to 1967. Minnesota and North Dakota Crop and Livestock Reporting Services.

Table 20.--Sunflowers: Comparison of gross returns per acre with soybeans and flaxseed in Minnesota and North Dakota, 1966 1/

Oilseed and State	Season average price received by growers	Yield per harvested acre	Gross return per acre
Soybeans			
Minnesota	$2.70/bu.	24.0 bu.	$64.80
North Dakota	$2.60/bu.	23.0 bu.	$59.80
Flaxseed			
Minnesota	$3.00/bu.	9.5 bu.	$28.50
North Dakota	$2.85/bu.	9.0 bu.	$25.65
Sunflowers			
Minnesota	5.1¢/lb.	920 lb.	$46.90
North Dakota	5.7¢/lb.	880 lb.	$50.15

1/ Based on 1966 average prices and yields for each State.

planted in 1967 is due largely to an expansion of oilseed varieties. Almost half, or 116,000 acres, are of oilseed varieties; the remaining 120,000 acres are birdfeed and confectionery varieties. No breakdown of varieties planted is available for former years.

If yields per harvested acre averaged at about the 1966 rate (900 pounds), total 1967 sunflower seed production in the Red River Valley and adjacent counties would be around 200 million pounds, compared with 65 million pounds in 1966. Assuming about half the seed will be crushed, sunflower oil production in 1967-68 would total around 40-50 million pounds. Sunflower meal output would be around 18,000 tons.

Oilseed processors contract with farmers to grow sunflowers, guaranteeing them a price agreed on before planting. The price is based for the most part on prices for other oilseeds--mainly soybeans and flax. Processors offer to supply high-oil content sunflower seed, provide planting and cultural information, and take delivery and make cash payment for the producers' entire crop at harvest time. During 1967/68, 3 domestic crushing mills are expected to handle sunflowers.

Sunflowers are usually planted early in May and harvested in September-October, just before the seed is ripe enough to shatter from the heads. Harvesting as soon as the seed is ready minimizes bird and rodent damage.

Returns From High-Oil Sunflowers More Favorable Than Flax

The 1966 gross return per acre from sunflowers in Minnesota-North Dakota averaged about $48, compared with $27 for flaxseed and $62 for soybeans (table 20). Yield of sunflowers per acre in 1966 averaged 920 pounds in Minnesota and 880 pounds in North Dakota.

Many farmers obtain yields of 1,000 pounds per acre. Yields of 1,500 to 2,000 pounds are achieved by some. The higher yields are necessary if sunflowers are to compete economically with soybeans in areas where both crops are grown. Good yields can be obtained if adapted varieties are planted, and recommended fertilizing and other cultural practices are followed. Table 21 shows average yields and other characteristics of sunflower varieties at Rosemount and Crookston, Minnesota, 1962-66, as compiled by the University of Minnesota Agricultural Experiment Station.

Assuming sunflower seed yields of 1,000 pounds per acre in Minnesota and North Dakota and oil content of 40%, sunflower oil output per acre would be 400 pounds, compared with 270 pounds for soybean oil and 200 pounds for linseed oil (table 22). Meal yields per acre would be as follows: sunflower, 350 pounds; soybean, 1,175 pounds, and linseed, 360 pounds.

Historically, sunflowers have not competed economically with feed grains and other crops in the Corn Belt. They have been grown successfully in nothern regions above the Corn Belt.

U.S. Imports of Sunflower Seed Are Mainly From Canada

The United States imported an average 12 million pounds of sunflower seed annually during 1960-66; about three-fourths of which came from Canada. In 1966, total imports were about 16 million pounds, with Canada accounting for nearly 14 million pounds (table 23). These imports have been used by the whole seed trade and not for processing into oil.

Sunflower oil imports have varied widely (from 30,000 pounds in 1961 to 389,000 pounds in 1963). In 1966, U.S. imports were 109,000 pounds, with Canada supplying 94,000 pounds of the total.

U.S. imports of sunflower seed and oil likely will decline as domestic production of sunflowers increases.

Table 21.--Average yields and other characteristics of sunflower varieties at Rosemount and Crookston, Minnesota, 1962-66

Variety	Years of trial 1/	Yield per acre	Oil content 2/	Large seed 3/	Weight per 100 seeds	Bushel weight	Flowering date (July)	Plant height	Lodging 4/
		Pounds	Percent	Percent	Grams	Pounds		Inches	
Arrowhead	1962-66	1,653	30.2	1	8.0	29.8	22	63	3.0
Mingren	1962-66	1,639	28.3	36	11.0	24.6	26	63	3.5
Commander	1963-66	1,493	28.1	30	10.9	25.2	27	64	3.1
Peredovik	1962-66	1,355	43.8	0	6.3	28.6	29	69	3.9
Armavirec	1965-66	1,231	42.9	0	7.1	30.8	19	55	2.9
VNIIMK 89.31	1963-66	1,538	44.4	0	6.0	29.3	28	70	3.4
Smena	1964-66	1,428	46.4	0	6.2	29.7	28	64	3.5

1/ Data for varieties not grown in all years are adjusted to be comparable.
2/ Dry matter basis.
3/ Held on 20/64 round hole screen.
4/ One erect, nine flat.

Source: "The Sunflower Crop In Minnesota," Extension Bulletin 299, 1967, Agricultural Extension Service, University of Minnesota.

Table 22.--Sunflower seed: Oil and meal output per acre compared with soybean and flaxseed

Oilseed	Oilseed yield per acre	Oil		Meal	
		Content of seed	Output per acre	Content of seed	Output per acre
	Pounds	Percent	Pounds	Percent	Pounds
Sunflower 1/	1,000	40	400	35	350
Soybean	2/1,500	18	270	78	1,175
Flaxseed	3/560	36	200	64	360

1/ Whole seed basis.
2/ 25 bushels weighing 60 pounds each.
3/ 10 bushels weighing 56 pounds each.

Table 23.--Sunflower seed and oil: U.S. imports, by country of origin, 1960-66

Sunflower Seed

Country of origin	1960	1961	1962	1963	1964	1965	1966
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.
Canada	6,374	9,982	14,763	9,313	4,872	5,297	13,784
Greece	131	127	873	108	---	---	---
Br. E. Africa	223	559	1,519	1,270	---	---	---
Mozambique	950	---	1,142	861	---	---	---
Rep. S. Africa	678	1,050	1,663	3,780	716	---	1,394
Hungary	153	50	---	---	---	---	---
Kenya	---	---	---	---	201	928	322
Tanzania	---	---	---	---	---	99	---
Other	31	---	78	34	---	508	196
Total	8,540	11,767	20,038	15,366	5,788	6,832	15,696

Sunflower oil

	1960	1961	1962	1963	1964	1965	1966
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.
Canada	---	9	5	367	10	39	94
Netherlands	---	21	111	21	---	24	13
Argentina	---	---	80	---	---	---	---
Germany, West	32	---	---	---	---	---	1
Uruguay	---	---	---	---	350	---	---
Other	---	---	---	1	1	---	1
Total	32	30	196	389	362	63	109

Bureau of the Census.

Table 24.--Sunflower seed 1/:--Estimated world production, by specified countries, 1960-66

Continent and country	1960	1961	1962	1963	1964	1965 2/	1966 2/
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
North America:							
Canada	13.2	10.9	7.9	18.1	14.0	13.3	12.7
South America:							
Argentina	802.0	585.0	860.0	462.0	460.0	757.0	782.0
Uruguay	72.4	57.0	79.7	87.2	63.4	38.7	99.3
Total (including other) 3/	925.8	676.3	972.8	589.8	568.6	846.3	938.8
Europe:							
Bulgaria	343.6	301.4	357.0	336.0	337.0	357.0	421.0
Rumania 4/	521.7	481.4	449.5	505.9	518.1	564.8	671.0
Yugoslavia	98.3	117.0	161.0	231.0	260.0	265.0	282.0
Total (including other) 3/	1,067.0	1,046.7	1,156.3	1,279.4	1,290.5	1,313.9	1,528.2
U.S.S.R. (Europe and Asia) 5/	3,650.0	4,373.0	4,411.0	3,942.0	5,573.0	5,013.0	5,649.0
Africa:							
Ethiopia	12.0	25.0	25.0	26.3	30.0	31.0	34.0
South Africa, Rep. of	90.7	112.2	98.3	98.7	77.7	76.2	100.8
Total (including other) 3/	117.8	150.5	136.3	148.2	129.4	127.7	156.8
Asia:							
Turkey	123.0	75.0	60.0	87.0	165.0	160.0	225.0
Other 6/	65.6	67.3	69.0	69.8	75.3	84.4	78.3
Total	188.6	142.3	129.0	156.8	240.3	244.4	303.3
Oceania:							
Australia	2.5	1.8	1.1	2.4	2.0	1.8	2.0
World total	5,964.9	6,401.5	6,814.4	6,136.7	7,817.8	7,560.4	8,590.8

1/ Southern Hemisphere sunflower crops which are harvested early in the calendar year are combined with those of Northern Hemisphere which are harvested in the latter months of the same year. 2/ Preliminary. 3/ Includes estimates for minor producing countries. 4/ Includes production from intercropping. 5/ Unofficial estimates; that is, official Soviet data (barn yields) less 8% dockage. 6/ Includes estimates for Mainland China as well as for minor producing countries.
Foreign Agricultural Service.

U.S.S.R. World's Leading Producer of Sunflowers

World sunflowerseed production in 1966 set a new record of 8.6 million metric tons--14 percent above 1965. The U.S.S.R. accounted for 5.6 million tons, or two-thirds of the world total. Most of the rest is produced in Southeastern Europe and Argentina (table 24). The marked increase in Soviet production of sunflower seed has been followed by development and expansion of exports--in competition with U.S. soybeans and soybean oil.

A major factor leading to greater acreage and production has been the success achieved by the Soviets in improving oil content of sunflower seed. By use of hybrids, the U.S.S.R. brought oil yield up from 27-31% in 1950 to 40-44% in 1965. The Soviets anticipate they will have varieties available in the next few years with oil content approaching 60%. Also, an increasing proportion of the Russian crop has been processed by the more efficient solvent extraction technique. These factors have combined to more than triple Soviet output of sunflower oil since 1955.

Outlook for Sunflowers in the United States

Sunflowers offer farmers an alternative cash grain crop in the Red River Valley area. The sunflower plant is well adapted to that climate, and familiar crop production methods and equipment can be utilized. Sunflowers probably will become more competitive with other crops in the area as continuing research leads to increased yields per acre, greater disease-and insect-resistance, and higher oil content. Thus, domestic production probably will continue to expand.

As an oilseed crop, sunflower has an advantage over flaxseed and soybeans because of its higher oil yield per acre. By the same token, the oil from sunflowers will have to contribute more than half to the total value of products from crushing sunflower seeds, since sunflower meal is lower priced than competing oil meals. In the case of soybeans, the leading U.S. oilseed crop, soybean oil accounts for about 40% of the total product value and the soybean meal fraction about 60%.

Since sunflower oil is high in polyunsaturates and has excellent keeping quality, it may be possible to market the oil at some premium over soybean oil. However, sunflower oil is not as widely known by domestic consumers as other salad and cooking oils, such as corn and peanut oil (which have been widely accepted). An aggressive national merchandising and promotional campaign by the U.S. sunflower oil industry will be required if it is to gain the popularity of other edible oils in this country.

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ANNUAL AND SEASONAL TRENDS IN U.S. LARD PRODUCTION*

by
Stanley A. Gazelle

Lard, a byproduct of the hog industry, is one of the major food fats produced in the United States. Its production is determined by the total number of hogs slaughtered, the average live weight of the animals killed, and the yield per 100 pounds of live weight hog. Lard is obtained from leaf fat (which is nearly pure fat), other fat cuts (such as the fat back and plates), and fat trimmings (obtained in cutting up the hog carcass).

Since hogs are raised for pork, lard output is a function of pork prices and demand for pork, rather than demand for lard itself. This factor, along with changes in animal weights and yields, results in a wide variation of lard production, both on an annual and seasonal basis.

This study traces some of the major trends in the commercial hog industry during the post-war era and their effect on lard production. The period covers the October-September marketing years, from 1950/51 to 1965/66. Differences between seasonal variations for the marketing years 1950-54 and 1961-65 were analyzed to determine the principle changes.

Since 1950, there have been some rather significant changes in lard production. Although pork production has trended upward, annual output of lard has declined, due primarily to lower yields of lard per 100 pounds of live hog and the trend toward breeding of the meat-type hog. However, this decline has been partially offset by a gradual increase in hog slaughter and an uptrend in the average live weight of animals killed.

Seasonally, there is less monthly variation in lard (and pork) production today than in the early post-war period. This is due to smaller swings in the hog slaughter pattern and average live weights of hogs killed.

Annual Changes in Lard Output Are Influenced Primarily By Hog Slaughter

As shown in Figure 1, most of the annual changes in lard (and pork) production result from similar changes in the number of hogs slaughtered. During the 1950-65 period, output of both products followed the hog slaughter cycle rather closely.

Hog slaughter ranged from a low of 63.4 million head in 1953/54 to a peak 83.0 million in 1963/64, when it again turned downward (table 25). Generally, slaughter followed an irregular, upward trend. Lard production ranged from a high of 2.6 billion pounds in 1951/52 to a low of 1.9 billion in 1965/66. The high and low points of lard output do not coincide exactly with those of hog slaughter, due to the declining yield of lard per 100 pounds of live weight hog. Pork production ranged from a low of 8.7 billion pounds in 1953/54 to a record 12.0 billion in 1963/64.

During the period, the average live weight of hogs killed varied about 9 pounds, dropping from a high of 242 pounds in 1950/51 to a low of 233 pounds in the mid-1950's. Subsequently, it trended upward again, reaching 242 pounds in 1965/66. Yearly variations in the average weight at slaughter are due to several factors, such as: the available supply and price of feeds for fattening

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* This paper analyzes commercial hog slaughter and lard production which consists of that in "federally inspected" and "other commercial" plants. Farm hog slaughter and lard production are excluded, since they have shown a steady post-war downtrend and currently are relatively small.

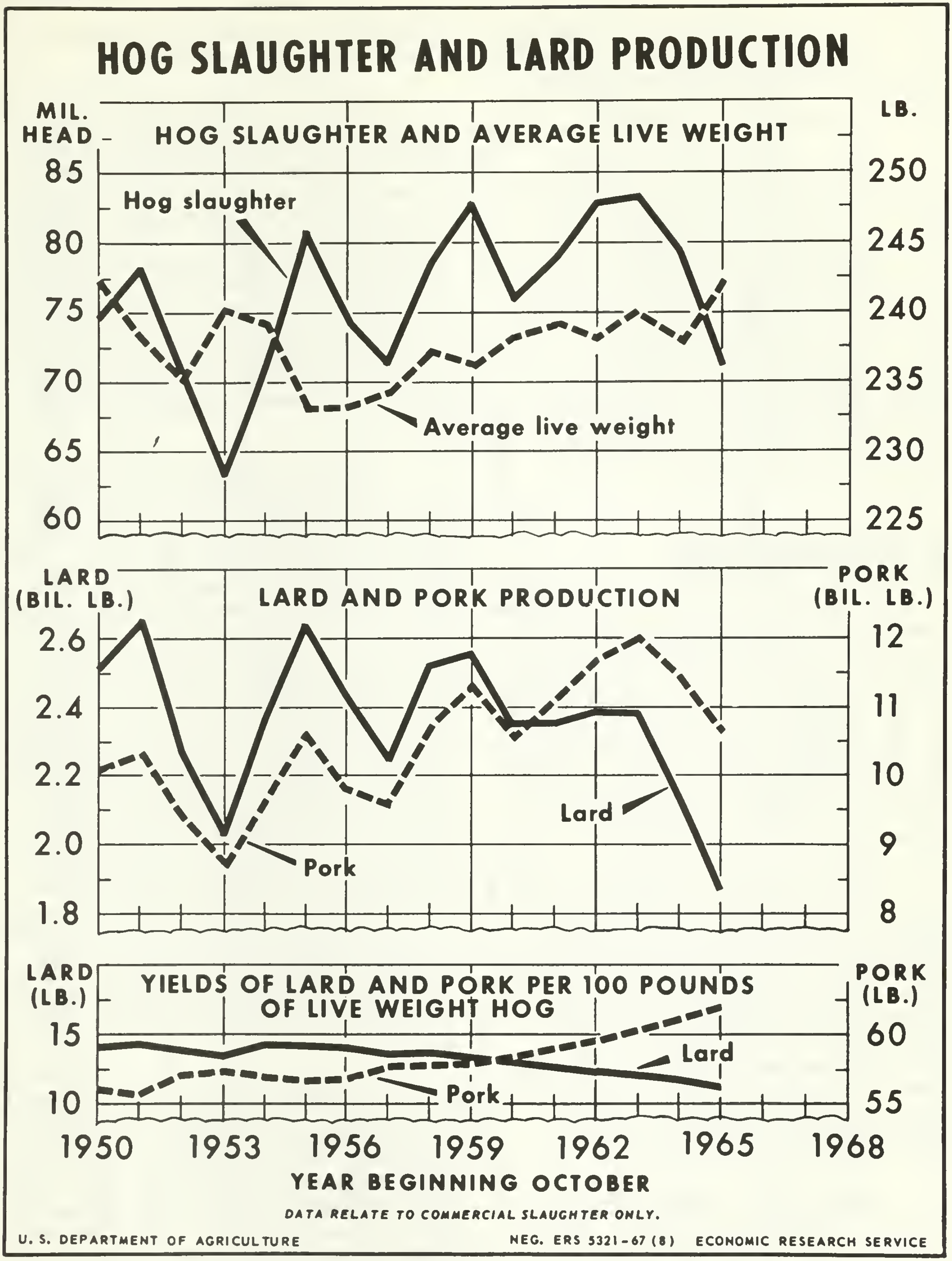
HOG SLAUGHTER AND LARD PRODUCTION
MIL. HEAD
HOG SLAUGHTER AND AVERAGE LIVE WEIGHT
LB.
85
80
75
70
65
60
250
245
240
235
230
225
Hog slaughter
Average live weight
LARD (BIL. LB.)
LARD AND PORK PRODUCTION
PORK (BIL. LB.)
2.6
2.4
2.2
2.0
1.8
12
11
10
9
8
Lard
Pork
LARD (LB.)
YIELDS OF LARD AND PORK PER 100 POUNDS OF LIVE WEIGHT HOG
PORK (LB.)
15
10
60
55
Lard
Pork
1950
1953
1956
1959
1962
1965
1968
YEAR BEGINNING OCTOBER
DATA RELATE TO COMMERCIAL SLAUGHTER ONLY.
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Figure 1

hogs; the profitableness of feeding hogs to various weights; regional differences in hog production; and changes in the proportion of the different classes of hogs constituting total slaughter.

Over this period, there was a marked shift in the relative proportions of lard and pork produced from each 100 pounds of live hog slaughtered. The average yield of lard dropped nearly 25 percent from 1951/52 to 1965/66. Conversely, the average yield of pork increased about 11 percent. Lower lard yields (and increased pork yields) chiefly reflect improved breeding and feeding practices and the gradual shift to the meat-type hog. As is evident from Figure 1 and Table 25, these trends have become more pronounced in recent years.

Lard Production Now Shows Flatter Seasonal Pattern

In the post-war period, the seasonal pattern in lard output also has undergone changes. Like the annual trend, seasonal output of lard (and pork) closely follows the hog slaughter pattern (figure 2). As in the past, lard production still hits its seasonal high in the fall of the year, when hog slaughter is at its peak. However, the rise is not as pronounced as it was in the 1950-54 period, due to smaller variations in slaughter.

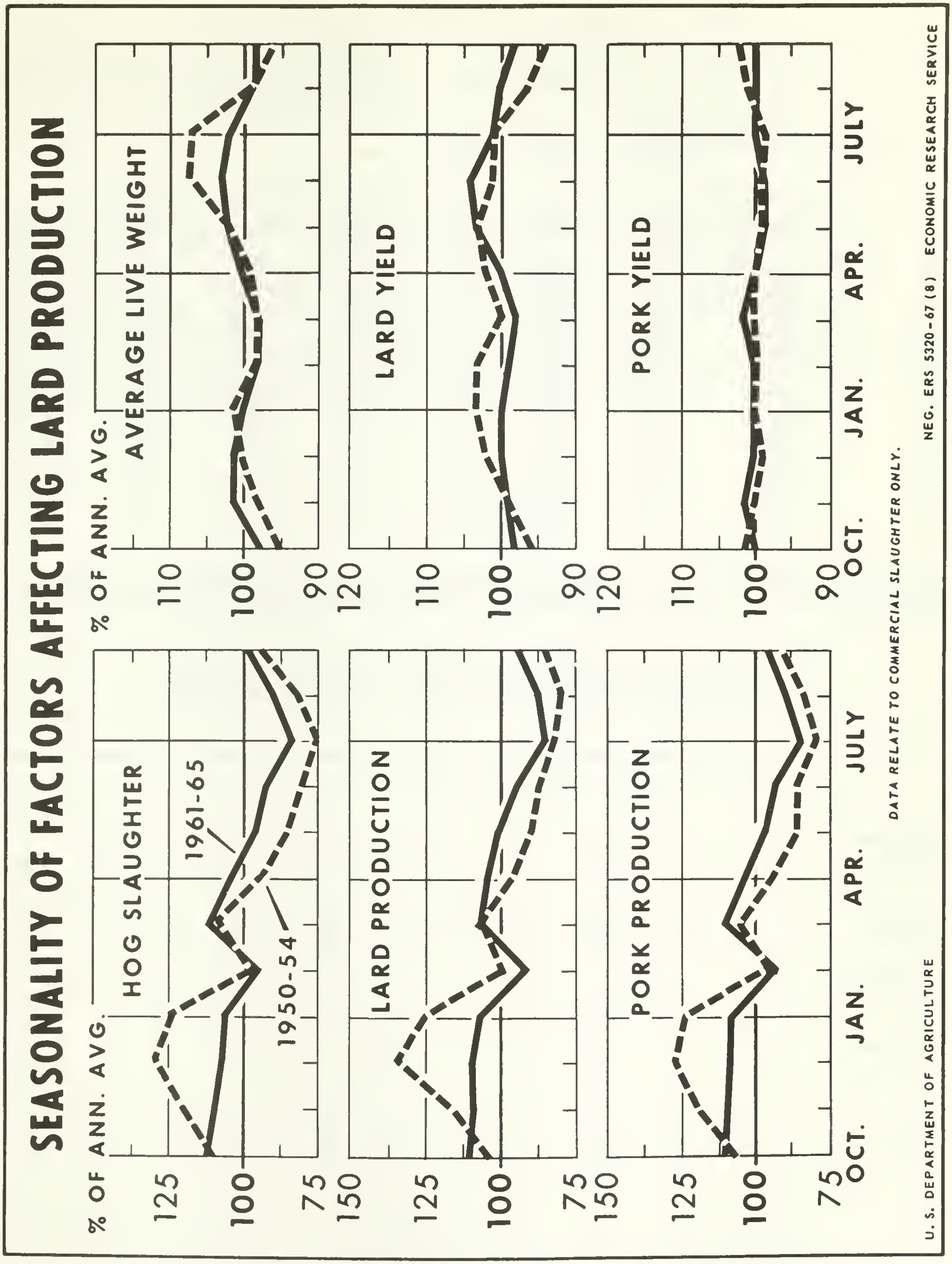
Typically, the peak month of lard production now occurs in October, about 2 months before the peak month in the earlier period. It coincides exactly with the peak for hog slaughter. From the autumn high, production declines irregularly to a seasonal low by mid-summer--about 1 month before the low of the 1950-54 period. From March through summer, the decline is not as steep as in the early 1950's, because slaughter currently is seasonally higher during these months than in past years.

Seasonal lard production varies less than it used to. It ranges from 110 percent of the annual average in October to around 86 percent in July. In 1950-54, the variation ranged from 133 percent in December to 79 percent in August (table 26 and figure 2).

Variations in the yield of lard per 100 pounds of live weight hog also are smaller today than in the previous period. Yields reach seasonal lows around September or October, and again in March, when they are about 98 percent of the average annual output. The high occurs around June, when it totals about 104 percent of average. In the 1950-54 period, the peaks occurred in early winter and late spring, at about 103 percent of the average annual output. The low was reached in September, at about 94 percent of the annual average (table 26 and figure 2).

Change in seasonal production of lard can be traced directly to changes in the hog slaughter pattern and the average live weight of hogs killed. Although slaughter still follows the same basic pattern, the seasonal variation today is less pronounced than formerly. This is the result of a more even distribution of farrowings. The seasonal peak usually occurs in October, about 2 months earlier than in 1950-54. However, the increase is not as sharp as before. Except for a steep rise in early spring, slaughter declines to its seasonal low by mid-summer before turning upward again. Today, the proportion of pigs farrowed in the fall is larger than it used to be. Since most of these pigs are butchered during the summer, the result is a smoother slaughter pattern for the entire year. The variation today ranges from 112 percent of the annual average in October to 83 percent in July. In the 1950-54 period, it ranged from 128 percent in December to 75 percent in July.

The average live weights of hogs slaughtered have also changed. In 1950-54, the seasonal low occurred in the early fall; the peak came in early summer, when slaughter of heavy sows increased. Today, the peak still occurs in summer but is less pronounced than previously. Also, the variation in the fall of the year is less than before. Seasonal lows occur in early autumn and late winter.



SEASONALITY OF FACTORS AFFECTING LARD PRODUCTION

DATA RELATE TO COMMERCIAL SLAUGHTER ONLY.

U. S. DEPARTMENT OF AGRICULTURE NEG. ERS 5320-67 (8) ECONOMIC RESEARCH SERVICE

Figure 2

Table 25.--Total commercial hog slaughter, lard and pork production, and average weights and yields, 1950-65

Year beginning October	Number slaughtered 1/	Average live weight per hog killed	Total production: Lard, rendered 2/	Total production: Pork, excluding lard 3/	Average yield per 100 pounds of live weight hog: Lard	Average yield per 100 pounds of live weight hog: Pork	Average yield per hog: Lard	Average yield per hog: Pork
	Thousand	Pounds	Million pounds	Million pounds	Pounds	Pounds	Pounds	Pounds
1950	74,548	242	2,505	10,078	13.9	56.0	33.6	135.2
1951	78,028	238	2,634	10,296	14.2	55.6	33.8	132.0
1952	70,470	235	2,261	9,427	13.7	56.9	32.1	133.8
1953	63,420	240	2,028	8,709	13.4	57.2	32.0	137.3
1954	70,818	239	2,363	9,638	14.0	56.9	33.4	136.1
1955	80,510	233	2,632	10,578	14.1	56.4	32.7	131.4
1956	74,234	233	2,426	9,769	14.0	56.5	32.7	131.6
1957	71,183	234	2,246	9,561	13.5	57.4	31.6	134.3
1958	78,150	237	2,514	10,657	13.6	57.5	32.2	136.4
1959	82,561	236	2,556	11,278	13.1	57.9	31.0	136.6
1960	75,995	238	2,345	10,551	13.0	58.3	30.9	138.8
1961	78,659	239	2,350	11,069	12.5	58.9	29.9	140.7
1962	82,424	238	2,389	11,685	12.2	59.6	29.0	141.8
1963	83,011	240	2,384	11,970	12.0	60.1	28.7	144.2
1964	78,354	238	2,130	11,382	11.4	61.0	27.2	145.3
1965	71,040	242	1,854	10,619	10.8	61.8	26.1	149.5

1/ Represents slaughter in federally-inspected establishments plus non-inspected slaughter in retail and wholesale establishments. Does not include farm slaughter. 2/ Includes rendered pork fat. 3/ Excludes lard and rendered pork fat.

Table 26.--Index of seasonal variation in commercial hog slaughter, average live weight of hogs, lard and pork production, and yields of lard and pork per 100 pounds of live weight hog, years beginning October, average 1950-54 and 1961-65 1/

Item	October	November	December	January	February	March	April	May	June	July	August	September
Hog slaughter												
1950-54	111	121	128	123	98	108	95	84	81	75	82	94
1961-65	112	109	107	107	96	111	104	96	88	83	89	98
Average liveweight												
1950-54	95	98	100	101	98	98	99	102	107	107	99	96
1961-65	98	101	101	100	98	98	100	102	103	102	99	98
Lard production												
1950-54	103	116	133	126	98	107	96	88	87	82	79	85
1961-65	110	109	109	107	92	106	104	101	95	86	87	94
Pork production												
1950-54	107	119	127	124	95	106	94	86	87	80	83	92
1961-65	111	110	108	108	94	110	104	97	89	84	89	96
Yield of lard												
1950-54	96	99	102	103	103	100	102	103	101	101	96	94
1961-65	98	99	100	100	99	98	100	103	104	101	100	98
Yield of pork												
1950-54	101	100	99	100	100	100	100	99	99	99	101	102
1961-65	100	101	100	100	100	101	100	99	99	100	100	100

1/ Indexes of seasonal variation were computed from monthly data of marketing years shown.

The variation ranges from 103 percent of the annual average in the summer to 98 percent in the fall and winter. In the earlier period, it ranged from 107 percent in the summer to 95 percent in the fall.

This change in the seasonal variation is due primarily to changes in the marketing pattern for hogs. In the early 1950's, heavy sows made up a much larger part of summer hog slaughter, thereby raising average live weights considerably. In recent years, sows slaughtered during the summer in relation to total slaughter have declined significantly; they are now somewhat higher in early fall. However, this is partly offset by sows being slaughtered at somewhat heavier weights. Also, sows now make up a smaller portion of the total annual hog slaughter, since fewer are needed for breeding because of an increase in the pigs per litter.

The flattening seasonal pattern in slaughter and lard output reflects in part the increased specialization in hog production. The number of larger producers has increased. Consequently, as a source of slaughter hogs, those producers who enter or leave the hog production industry in response to price alone are far less important than they used to be.

* * * * * * * * * * *

Table 27.--Food fats and oils: Supply and disposition, 1961-66

Year beginning October	Production			Stocks		Domestic disappearance			Exports		
	Oct.-July	Aug.-Sept.	Oct.-Sept.	Oct. 1	Aug. 1	Oct.-July	Aug.-Sept.	Oct.-Sept.	Oct.-July	Aug.-Sept.	Oct.-Sept.
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
	Total 1/										
1961	11,480	1,809	13,289	1,253	1,771	7,408	1,510	8,917	3,509	573	4,082
1962	11,941	1,913	13,853	1,488	2,186	7,545	1,347	8,891	3,667	683	4,351
1963	11,885	1,970	13,856	2,065	1,853	7,873	1,607	9,479	4,174	844	5,018
1964	12,364	1,756	14,120	1,361	1,306	7,937	1,629	9,565	4,445	595	5,040
1965	12,846	1,782	14,628	831	1,250	8,462	1,663	10,125	3,931	437	4,367
1966	12,680			925	1,461	8,165			3,936		
	Butter (actual weight), except farm 2/										
1961	1,357	195	1,552	238	469	1,116	239	1,356	12	6	19
1962	1,275	181	1,456	419	493	1,130	165	1,296	72	59	131
1963	1,244	181	1,425	450	253	1,149	221	1,370	294	25	319
1964	1,231	158	1,389	188	217	1,059	208	1,267	144	6	150
1965	958	145	1,103	161	92	1,009	167	1,176	22	2	24
1966	1,069			68	228	905			6		
	Lard, except farm										
1961	2,016	334	2,350	100	97	1,588	281	1,868	431	77	508
1962	2,031	358	2,389	73	114	1,542	268	1,810	449	123	571
1963	2,040	344	2,384	81	98	1,420	271	1,691	603	103	706
1964	1,831	299	2,130	68	82	1,429	276	1,705	387	44	431
1965	1,538	316	1,854	62	94	1,321	312	1,634	185	34	218
1966	1,698			64	118	1,437			207		
	Beef fats 3/										
1961	372	72	444	25	30	358	80	438	9	1	10
1962	394	86	480	21	47	360	98	457	8	2	9
1963	491	86	578	34	36	483	96	578	8	2	10
1964	443	92	535	25	28	434	94	527	7	4	11
1965	467	97	563	22	50	427	104	530	13	3	16
1966	522			40	81	464			19		
	Total edible vegetable oils 4/ 5/										
1961	7,735	1,208	8,943	890	1,175	4,409	923	5,332	2,992	476	3,468
1962	8,241	1,288	9,529	975	1,532	4,591	830	5,422	3,061	486	3,546
1963	8,110	1,359	9,469	1,500	1,466	4,913	1,039	5,951	3,177	695	3,872
1964	8,859	1,208	10,067	1,080	979	5,083	1,061	6,144	3,839	531	4,369
1965	9,883	1,224	11,108	587	1,014	5,758	1,091	6,849	3,659	387	4,046
1966	9,391			753	1,034	5,422			3,641		

Continued -

Table 27.--Food fats and oils: Supply and disposition, 1961-66

Year beginning October	Production			Stocks		Domestic disappearance			Exports		
	Oct.-July	Aug.-Sept.	Oct.-Sept.	Oct. 1	Aug. 1	Oct.-July	Aug.-Sept.	Oct.-Sept.	Oct.-July	Aug.-Sept.	Oct.-Sept.
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
	Cottonseed oil 5/										
1961	1,709	243	1,952	170	324	1,112	240	1,352	443	31	474
1962	1,702	227	1,930	296	514	1,138	208	1,347	346	45	392
1963	1,756	183	1,939	488	624	1,179	229	1,407	440	146	586
1964	1,819	183	2,001	433	421	1,274	281	1,555	557	86	643
1965	1,716	117	1,833	236	301	1,387	209	1,595	265	7	272
1966	1,161			202	299	992			73		
	Soybean oil 5/										
1961	5,588	887	6,475	677	780	2,937	604	3,540	2,548	445	2,993
1962	6,093	981	7,075	618	921	3,081	543	3,624	2,710	439	3,149
1963	5,839	1,086	6,925	920	759	3,322	736	4,058	2,677	532	3,209
1964	6,491	920	7,411	578	499	3,384	685	4,069	3,185	436	3,622
1965	7,562	1,002	8,564	297	598	3,928	759	4,688	3,333	378	3,711
1966	7,626			462	638	3,940			3,509		
	Corn oil										
1961	320	66	386	33	52	301	69	370	---	---	---
1962	327	68	395	50	63	314	68	381	---	---	---
1963	350	65	415	63	62	351	66	416	---	---	---
1964	356	80	435	62	39	378	83	462	---	---	---
1965	382	77	459	35	63	354	85	439	---	---	---
1966	370			55	48	363			15		
	Peanut oil 5/										
1961	70	3	73	9	18	60	10	70	1	6/	1
1962	86	8	94	11	34	58	11	69	5	1	6
1963	111	12	123	30	20	61	8	69	59	17	76
1964	155	18	173	8	20	47	12	59	96	8	104
1965	184	21	205	18	52	88	38	126	61	2	63
1966	185			34	48	126			44		

1/ Includes butter, except farm; lard, except farm; beef fats; and edible vegetable oils. Production and exports include the oil equivalent of exported oilseeds. Domestic disappearance and exports have been adjusted for exports of processed food oils not classified by kind, shortening, margarine, and other secondary fats. Exports also include shipments and quantities from CCC stocks that were not reported in Census data. During 1960-64 exports include estimates of foreign donations of fats and oils. 2/ 1962-64 stocks include estimates of butter oil, ghee, and canned butter. 3/ Includes edible tallow, oleo stock, oleo oil and oleo stearine. 4/ Includes cottonseed, soybean, corn, peanut, and edible olive oils. Production includes imports of corn, cottonseed, peanut, and edible olive oils. 5/ Production and exports include oil equivalent of oilseed exported for crushing. 6/ Less than 500,000 pounds.

Totals computed from unrounded numbers.

Table 28.--Domestic disappearance of food and nonfood fats and oils, by end products, total and per person, year beginning October by quarters, with comparisons

Year and Quarter	Unit	Food							Nonfood				All products (fat content)
		Butter (actual weight)	Margarine (actual weight)	Lard (direct)	Baking and frying fats (shortening)	Salad and cooking oils 1/	Other edible 2/	Total (fat content)	Soap 3/	Drying oils 4/	Other 5/	Total	
1964-65													
Oct.-Dec:													
Total	Mil.lb.	354	483	302	665	706	---	2,268	164	199	925	1,288	3,556
Per person	Lb.	1.8	2.5	1.6	3.4	3.7	---	11.8	.8	1.0	4.8	6.7	18.4
Jan.-Mar:													
Total	Mil.lb.	335	494	314	608	614	86	2,291	214	211	833	1,257	3,548
Per person	Lb.	1.7	2.6	1.6	3.1	3.2	.4	11.8	1.1	1.1	4.3	6.4	18.3
Apr.-June													
Total	Mil.lb.	312	445	306	634	637	---	2,185	190	255	829	1,275	3,460
Per person	Lb.	1.6	2.3	1.6	3.3	3.3	---	11.2	1.0	1.3	4.3	6.6	17.8
July-Sept:													
Total	Mil.lb.	289	460	278	736	666	---	2,284	203	244	775	1,222	3,506
Per person	Lb.	1.5	2.4	1.4	3.7	3.4	---	11.7	1.0	1.2	4.0	6.3	18.0
Season:													
Total	Mil.lb.	1,291	1,881	1,200	2,643	2,624	---	9,028	772	909	3,362	5,043	14,070
Per person	Lb.	6.6	9.7	6.2	13.6	13.5	---	46.5	4.0	4.6	17.2	25.8	72.3
1965-66													
Oct.-Dec:													
Total	Mil.lb.	356	504	328	774	655	92	2,540	110	200	879	1,189	3,729
Per person	Lb.	1.8	2.6	1.7	4.0	3.4	.5	13.0	.6	1.1	4.5	6.1	19.1
Jan.-Mar:													
Total	Mil.lb.	314	527	255	790	701	96	2,521	194	255	944	1,393	3,915
Per person	Lb.	1.6	2.7	1.3	4.0	3.6	.5	12.9	1.0	1.3	4.8	7.1	20.0
Apr.-June:													
Total	Mil.lb.	275	486	260	742	693	---	2,269	207	226	943	1,375	3,644
Per person	Lb.	1.4	2.5	1.3	3.8	3.5	---	11.5	1.1	1.1	4.8	7.0	18.5
July-Sept:													
Total	Mil.lb.	248	495	271	832	711	---	2,385	199	222	894	1,315	3,700
Per person	Lb.	1.3	2.5	1.4	4.2	3.6	---	12.1	1.0	1.1	4.5	6.7	18.8
Season:													
Total	Mil.lb.	1,193	2,012	1,115	3,138	2,760	117	9,714	710	903	3,660	5,273	14,987
Per person	Lb.	6.1	10.2	5.7	16.0	14.1	.6	49.5	3.6	4.6	18.7	27.0	76.3
1966-67 6/													
Oct.-Dec:													
Total	Mil.lb.	295	577	290	774	661	---	2,394	132	234	993	1,359	3,752
Per person	Lb.	1.5	2.9	1.5	3.9	3.3	---	12.1	.7	1.1	5.0	6.9	19.0
Jan.-Mar:													
Total	Mil.lb.	287	556	267	780	658	186	2,571	202	189	888	1,279	3,849
Per person	Lb.	1.7	2.8	1.3	3.9	3.3	.9	13.2	1.0	1.0	4.5	6.4	19.4
Apr.-June:													
Total	Mil.lb.	265	507	253	769	672	---	2,277	219	199	910	1,329	3,606
Per person	Lb.	1.3	2.5	1.3	3.9	3.4	---	11.5	1.1	1.0	4.6	6.7	18.1
July-Sept:													
Total	Mil.lb.												
Per person	Lb.												
Season:													
Total	Mil.lb.												
Per person	Lb.												

1/ Not reported separately prior to 1959; included in "other edible" category.

2/ Mainly salads and cooking oils prior to January 1959. Includes all oils and fats (other than butter, lard, margarine and shortening) used in mayonnaise and salad dressing, bakery goods, and confectionery, commercial roasting and frying etc.

3/ Fat equivalent of soap used in synthetic rubber is included in "other industrial products". Adjusted for foreign trade and changes in stocks.

4/ Paints, varnishes, floor coverings, oilcloth, printing inks, core oils, synthetic resins, insulation, linings, packings, coated fabrics, caulking and other protective coatings.

5/ Includes use of fats and oils in chemicals, lubricants and greases, animal feeds; tin and terne plate, pharmaceuticals, leather, candles, synthetic organic detergents, toilet articles, and miscellaneous industrial products.

6/ Preliminary.

Computed from unrounded numbers.

Table 29.--Fats, oils, including their products: Production from domestic and imported materials, and factory and warehouse stocks at end of month

Item	Production 1/						Stocks			
	Oct.-July		1966	1967			1966	1967		
	1965-66	1966-67	July	May	June	July	July 31	May 31	June 30	July 31
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
PRIMARY FATS AND OILS										
Food fats and oils										
Butter 2/	958.2	1,068.7	83.1	129.1	129.5	104.9	92.2	151.2	191.6	228.5
Lard and rendered pork fat 3/	1,538.0	1,698.0	131.0	164.0	157.0	144.0	93.8	128.1	128.1	118.5
Beef fats	466.9	522.2	42.2	59.9	50.1	41.8	50.0	80.8	83.5	80.8
Total edible animal fats	2,963.1	3,288.9	256.3	353.0	336.6	290.7	236.0	360.1	403.2	427.8
Corn oil	375.4	368.4	37.5	38.5	40.2	33.9	63.2	50.0	49.2	48.2
Cottonseed oil	1,712.8	1,144.3	50.6	43.5	49.6	30.2	300.8	416.7	364.7	299.2
Peanut oil	142.7	144.2	13.0	16.1	15.1	10.7	51.9	48.7	49.7	47.8
Soybean oil	4,980.6	5,036.0	451.8	514.7	513.5	494.1	598.2	633.7	591.0	638.3
Total edible vegetable oils	7,211.5	6,692.9	552.9	612.8	618.4	568.9	1,014.1	1,149.1	1,054.6	1,033.5
Soap fats and oils										
Tallow, inedible, and greases excluding wool grease 4/	3,625.7	3,945.2	363.9	406.8	415.1	392.6	382.1	481.8	432.4	430.6
Palm oil 5/	---	---	---	---	---	---	17.5	33.6	26.1	18.5
Fish and marine oil 5/	111.2	88.1	29.6	9.1	20.1	21.5	151.0	165.9	165.6	168.4
Coconut oil	287.8	---	41.9	---	---	---	149.5	184.5	145.9	115.2
Total soap fats	4,024.7	4,033.3	435.4	415.9	435.2	414.1	700.1	865.8	770.0	732.7
Drying Oils										
Castor oil 5/	---	---	---	---	---	---	193.5	163.8	156.5	159.4
Linseed oil	377.4	314.1	15.9	32.5	35.4	7.2	212.5	211.8	199.2	183.9
Safflower seed oil	63.4	13.5	---	---	---	---	29.2	46.1	42.9	35.8
Tall oil	1,032.4	1,040.6	100.2	107.3	107.3	95.1	281.1	237.6	237.0	221.7
Tung oil	5.4	5.4	---	---	---	---	56.3	76.9	75.2	74.3
Total drying oils	1,478.6	1,373.6	116.1	139.8	142.7	102.3	772.6	736.2	710.8	675.1
Grand total 6/ 7/	15,677.8	15,388.7	1,360.7	1,521.6	1,532.9	1,376.0	2,722.8	3,111.2	2,938.6	2,869.1
From domestic materials	15,390.0	15,388.7	1,318.8	1,521.6	1,532.9	1,376.0				
From imported materials	287.8	---	41.9	---	---	---				
FAT-AND-OIL PRODUCTS										
Cooking and salad oils										
Total	2,464.6	2,431.6	240.9	251.0	255.6	230.3	85.8	87.8	84.7	84.5
Soybean	1,506.5	1,576.0	154.1	160.6	162.3	152.0	50.8	58.7	61.0	58.2
Other	958.1	855.6	86.8	90.4	93.3	78.3	35.0	29.1	23.7	26.3
Baking and frying fats (shortening)										
Total	2,613.4	2,612.0	232.8	283.6	275.9	221.5	119.8	125.6	149.0	135.9
100% vegetable oil	N.A.	1,683.4	153.0	183.4	185.8	142.2	89.1	91.8	113.8	103.3
100% animal fats or blends of vegetable oil and animal fats	N.A.	928.5	79.8	100.2	90.1	79.3	30.7	33.8	35.2	32.6
Margarine										
Total	1,687.7	1,792.1	147.9	171.0	173.6	138.9	58.1	57.9	59.7	65.1
1 pound units	1,508.2	1,546.8	127.4	146.0	149.6	118.5	---	---	---	---
All other	179.2	262.8	20.7	26.8	24.4	23.4	---	---	---	---
Fatty Acids	924.4	907.5	83.6	91.3	82.7	73.3	85.7	109.9	98.6	104.2
Glycerine	291.1	304.7	25.4	32.7	30.3	28.0	36.7	40.4	44.6	43.5
Meat meal and tankage	3,220.3	3,442.5	299.4	347.7	348.7	324.5	---	---	---	---

---

1/ Factory production except as otherwise noted.

2/ Creamery butter and cold-storage stocks, United States Department of Agriculture.

3/ Total commercial. Excludes farm production. Federally inspected in October-July 1965/66 totaled 1,372.0 million pounds; October-July 1966/67 totaled 1,525.3 million pounds.

4/ Total apparent production.

5/ Stocks include GSA stockpile.

6/ Computed from unrounded numbers.

7/ Excludes estimated output of farm butter and farm lard, 59 million pounds in October-July 1965/66; 42 million pounds in October-July 1966/67.

Table 30.--Imports and exports of fats, oils, oil-bearing materials and fat-and-oil products in terms of oil

Item	Imports for consumption					Exports 1/				
	Oct.-July		1967			Oct.-July		1967		
	1965-66	1966-67	May	June	July	1965-66	1966-67	May	June	July
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Food fats and oils										
Butter	3.5	2.0	.1	2/	2/	15.7	3.5	.3	.3	.2
Lard	---	2/	---	---	---	131.3	153.9	13.0	13.5	19.6
Beef fats	1.2	1.3	2/	---	2/	12.8	17.8	3.0	.9	.3
Total, edible animal fats	4.7	3.3	.1	2/	2/	159.8	175.2	16.3	14.7	20.1
Corn oil	6.6	1.8	2/	---	---	---	3/7.4	1.3	1.3	1.6
Cottonseed oil	---	9.9	---	---	2/	259.8	69.9	2.1	3.0	5.0
Cottonseed (17 percent)	---	---	---	---	---	3.2	1.5	.3	.3	2/
Olive oil, edible	39.5	47.7	5.1	5.0	4.1	---	---	---	---	---
Peanut oil	2/	---	---	---	---	20.1	3.4	.4	2/	.5
Peanuts, shelled (43.5 percent)	---	---	---	---	---	41.1	40.6	3.2	2.5	4.0
Soybean oil	---	2/	---	---	---	731.3	896.7	103.6	142.7	102.9
Soybeans (18.3 percent)	2/	2/	2/	---	2/	2,581.4	2,590.1	223.7	214.3	185.0
Other vegetable oils	12.6	14.5	1.7	1.3	1.7	4.3	5.9	.5	.6	.5
Total, edible vegetable oils	58.7	73.9	6.8	6.3	5.8	3,641.2	3,615.5	335.1	364.7	299.5
Soap fats and oils										
Tallow, inedible	.8	3.2	.5	1.0	.6	1,527.5	1,766.3	196.7	231.8	203.8
Greases	.2	.3	---	2/	.2	126.1	124.2	14.8	13.2	11.4
Fish and fish liver oils non-medicinal	.6	7.3	---	---	2/	4/94.9	37.6	.2	.9	2.4
Marine mammal oils	47.1	45.4	1.6	4.4	1.6	---	---	---	---	---
Olive oil, inedible	.2	.9	.1	---	2/	---	---	---	---	---
Palm oil	28.1	79.2	1.3	.7	---	---	---	---	---	---
Total, slow-lathering oils	77.0	136.3	3.5	6.1	2.4	1,748.5	1,928.1	211.7	245.9	217.6
Coconut oil	417.6	453.9	24.3	25.8	24.1	6.0	8.6	.2	.1	.4
Copra (64 percent)	350.3	250.6	11.5	33.8	31.7	---	---	---	---	---
Palm kernel oil	88.1	92.1	13.2	6.2	9.0	---	---	---	---	---
Total, lauric-acid oils	856.0	796.6	49.0	65.8	64.8	6.0	8.6	.2	.1	.4
Drying oils										
Flaxseed (35.7 percent)	---	2/	2/	2/	2/	86.8	98.8	30.2	19.3	16.9
Linseed oil	2/	2/	2/	2/	2/	68.9	70.1	13.4	9.0	1.3
Oiticica oil	6.7	1.0	---	.2	.2	---	---	---	---	---
Tall oil	---	---	---	---	---	88.9	100.6	7.1	16.8	10.2
Tung oil	24.1	20.0	1.4	.9	.9	.7	1.1	.1	.1	.3
Safflower seed (36 percent)	---	---	---	---	---	77.1	47.4	9.7	3.0	1.0
Total	30.8	21.0	1.4	1.1	1.1	322.4	318.0	60.5	48.2	29.7
Other industrial oils and fats										
Cashew nut shell liquid (oil)	---	---	---	---	---	---	---	---	---	---
Castor oil	103.6	75.7	6.1	3.8	5.2	---	---	---	---	---
Castor beans (46.5 percent)	1.4	2/	---	---	---	---	---	---	---	---
Fish-liver oils, medicinal	10.4	7.9	1.0	.7	.9	---	---	---	---	---
Rapeseed oil	5.2	7.6	2/	---	1.2	---	---	---	---	---
Wool grease	4.4	7.9	1.0	.8	.8	---	---	---	---	---
Other vegetable oils and fats, inedible	13.2	10.9	1.3	.6	.8	44.3	38.6	5.2	3.5	2.3
Total	138.2	110.0	9.4	5.9	8.9	44.3	38.6	5.2	3.5	2.3
Other products										
Margarine (fat content)	---	---	---	---	---	2.5	2.2	.2	.2	.2
Shortening	---	---	---	---	---	27.3	27.5	3.4	2.0	3.7
Cooking and salad oils	---	---	---	---	---	---	---	---	---	---
Salad products (fat content)	---	---	---	---	---	5.7	5.9	.9	.6	.7
Soap (fat content)	2.1	1.7	.1	.1	.2	9.2	8.6	.6	1.0	.6
Fatty acids	8.4	8.9	.9	1.4	.8	65.7	74.5	6.2	7.3	7.5
Total	10.5	10.6	1.0	1.5	1.0	110.4	118.7	11.3	11.1	12.7
Grand total 5/	1,176.1	1,151.6	71.3	86.6	84.1	6,032.7	6,202.9	640.2	688.3	582.3
Glycerine (fat content)	3.6	4.6	.7	.1	.1	37.4	35.3	5.7	2.4	4.6
Tankage	2.9	4.0	.1	.2	.5	---	---	---	---	---

1/ Includes re-exports but not shipments. Shipments average about 90 million pounds per year of which approximately 60 million are lard. Beginning January 1965, includes foreign donations.

2/ Less than 50,000 pounds.

3/ Not reported prior to January 1967.

4/ Beginning January 1965, includes marine mammal oils and fish liver oils.

5/ Computed from unrounded numbers.

Table 31.--Index numbers of wholesale prices of fats and oils

Item	1957-59=100				
	August		1967		
	1965	1966	June	July	August 1/
All fats and oils	104	120	95	92	
All fats and oils, except butter	102	115	83	80	
Grouped by origin:					
Animal fats	108	119	96	94	
Vegetable oils, domestic	94	129	92	88	
Vegetable oils, foreign	101	92	93	96	
Grouped by use:					
Butter	104	124	113	113	
Butter, seasonally adjusted	109	130	122	120	
Lard	111	112	75	69	
Lard, refined	---	133	102	98	
Food fats other than butter	100	122	86	81	
Food fats other than butter and lard	95	127	90	85	
All edible fats and oils	103	124	100	97	
Soap fats	104	103	77	75	
Drying oils	97	104	90	88	
Other industrial	95	97	81	80	
All industrial	105	105	81	78	
Edible vegetable oils, grouped by degree of processing:					
Crude	93	128	92	87	
Refined	90	118	94	88	
End products	101	109	102	101	
Margarine	102	104	100	100	
Shortening, 3 lb. tin	---	105	98	96	
Shortening, 400 lb. drum	---	120	103	103	

All indexes except "Butter, seasonally adjusted" and "Other industrial" from Bureau of Labor Statistics.

1/ Not available as of September 26.

Table 32.--Prices received by farmers and prices at terminal markets for specified oil-bearing materials and oilmeals

Item	Unit	August		1967		
		1965	1966	June	July	August
		Dollars	Dollars	Dollars	Dollars	Dollars
OILSEEDS						
Copra, Philippines, c.i.f. Pacific Coast	Short ton	187.38	169.00	174.75	177.80	176.50
Cottonseed, United States average	Short ton	45.80	62.90	---	59.00	52.00
Flaxseed, No. 1, Minneapolis	Bushel	3.05	3.15	3.20	3.26	---
Flaxseed, United States average	Bushel	2.83	2.93	2.88	2.98	3.02
Peanuts, United States average (farmers' stock)	100 lb.	11.20	11.30	---	---	11.40
Peanuts, Virginias No. 1, shelled, Va.-N.C. 1/	100 lb.	18.75	19.12	20.62	20.50	20.00
Peanuts, Runners No. 1, shelled, Southeast 1/	100 lb.	19.12	19.12	---	---	---
Peanuts. Spanish No. 1, shelled, Southeast 1/	100 lb.	19.12	19.12	19.50	19.88	19.00
Peanuts, Spanish No. 1, shelled, Southwest 1/	100 lb.	19.38	19.00	19.62	---	19.00
Soybeans, No. 1, Yellow, Chicago	Bushel	2.75	3.73	2.90	2.83	2.81
Soybeans, No. 1, Yellow, Illinois country shipping points	Bushel	2.63	3.63	2.82	2.74	2.72
Soybeans, United States average	Bushel	2.53	3.49	2.71	2.66	2.56
OILMEALS (bulk)						
Copra meal, 20 percent protein, Los Angeles	Short ton	82.50	83.40	80.00	80.00	80.00
Cottonseed meal, 41 percent protein, Memphis	Short ton	64.40	88.00	76.50	74.50	76.20
Cottonseed meal, 41 percent protein, Chicago	Short ton	73.40	95.60	84.90	83.70	81.60
Cottonseed meal, 41 percent protein, Atlanta	Short ton	69.40	91.20	80.60	77.90	78.25
Cottonseed meal, 41 percent protein, Ft. Worth	Short ton	63.60	84.30	75.90	74.70	75.60
Fish meal, 60 percent protein, bagged, New York	Short ton	171.10	161.00	131.20	131.60	131.50
Fish meal, 60 percent protein, bagged, Los Angeles	Short ton	168.60	144.00	122.20	123.00	123.00
Linseed meal, 34 percent protein, Minneapolis	Short ton	66.50	80.70	73.10	74.60	74.80
Linseed meal, 34 percent protein, New York	Short ton	84.40	96.25	93.00	95.00	95.90
Peanut meal, 45 percent protein, f.o.b. Southeastern mills	Short ton	75.40	89.60	76.80	76.40	72.60
Safflower meal, 20 percent solvent, San Francisco	Short ton	30.10	34.50	32.25	29.00	27.80
Soybean meal, 44 percent protein, Chicago	Short ton	74.40	102.30	82.50	82.60	83.00
Soybean meal, 44 percent protein, Decatur	Short ton	69.60	97.90	78.10	78.20	78.70
Soybean meal, 44 percent protein, Atlanta	Short ton	77.90	105.10	85.00	85.40	86.40
Soybean meal, 44 percent protein, Memphis	Short ton	73.40	100.00	80.20	80.30	82.10
Soybean meal, 50 percent protein, Decatur	Short ton	80.50	106.10	87.20	85.00	86.90
Soybean meal, 50 percent protein, Memphis	Short ton	86.00	111.00	90.60	89.60	91.20
Soybean meal, 50 percent protein, Atlanta	Short ton	88.60	112.60	94.50	94.30	94.20

1/ This price applies to peanuts for edible uses.

Compiled from Oil, Paint, and Drug Reporter, Wall Street Journal, Chicago edition, reports of the Statistical Reporting Service, and the Consumer Marketing Service.

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